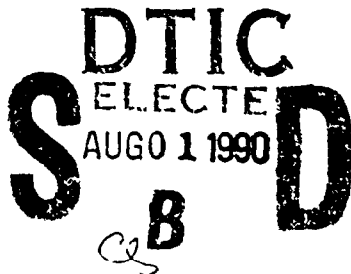


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AN ASSESSMENT OF MEDIA COVERAGE
OF THE B-2 STEALTH BOMBER

by

VIRGINIA L. SULLIVAN
B.S., Southern Illinois University, 1982

A thesis submitted to the
Faculty of the Graduate School of the
University of Colorado in partial fulfillment
of the requirements for the degree of
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An Assessment of Media Coverage of the B-2 Stealth Bomber

Thesis directed by Professor Russell E. Shain

The B-2 stealth bomber has been labelled by some media as the "most expensive airplane ever," while others have proclaimed it as the "most innovative" and "most efficient" aircraft ever built. This dichotomy of the press can be attributed to the sources being quoted in a specific article, according to the results of this study. The content analysis of "hard news" stories in the New York Times, the Washington Post, and the Los Angeles Times revealed that from the 13 categories analyzed as favorable or unfavorable, 55 percent of the 365 articles were unfavorable. Twenty-three percent of the articles were favorable. The remainder was classified neutral because the direction equalled zero. The qualitative part of this study consisted of personal and telephone interviews with military and political leaders. Although some military leaders expressed contempt for the media, they mainly pointed fingers at Congress for being tenuous in statements about the B-2 to the press. Since certain aspects of the media coverage were unfavorable, the media appeared to rely more on the agenda set by Congress than the military leaders' agenda. However, since both Congress and the military placed the B-2 prominently on their agendas, so did the press.

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CONTENTS

CHAPTER

I.	INTRODUCTION.....	1
	The Events	1
	The Impact	5
	The Theory	8
	Focus of Study	10
II.	LITERATURE REVIEW.....	15
	Introduction	15
	The Theory: Cultural	17
	The Theory: Agenda-Setting	20
	Other Studies	22
	Conclusion	26
III.	METHODOLOGY.....	31
	Introduction	31
	The Research Questions	33
	Operational Definitions	35
	Content Analysis	37
	The Sample	38
	Inter-coder Reliability Pretest	40
	The Coding	42
	The Interviews	44
	The Analysis	47

IV. RESULTS.....	50
Introduction	50
B-2's Cost	54
From the Experts	57
The Sample	58
The Direction	60
Observation of Results	64
Research Questions	66
V. CONCLUSION.....	71
B-2's History	71
B-2 and the Media	74
BIBLIOGRAPHY.....	81
APPENDIX	
A. CHARTS.....	86
Total Newspapers Analyzed	86
Total Themes Analyzed	87
Articles by Month	88
Newspapers by Direction	89
Newspapers by Location	90
B. CODING SHEET SAMPLE.....	91
C. QUESTIONS FOR INTERVIEWS.....	93
D. LETTER OF INSTRUCTION.....	94
E. LIST OF ARTICLES CODED.....	96

TABLES

Table

1.1	Significant Events.....	3
4.1	Total Newspapers Analyzed.....	51
4.2	Congressional Attributions.....	52
4.3	Themes Analyzed.....	53
4.4	Economic Factor by Newspaper.....	57
4.5	Timetable of Significant Events.....	58
4.6	Articles by Month.....	59
4.7	Newspapers by Direction.....	61
4.8	Newspapers by Location.....	62
4.9	Salience by Location.....	62
4.10	Direction by Location.....	63
4.11	Newspaper by Section.....	64

FIGURES

Figure

1.1	Photo of B-2 Roll-out Ceremony.....	2
1.2	Photo of B-2 First Flight.....	4
1.3	Photo of B-2 in Production.....	7

CHAPTER I

INTRODUCTION

On November 22, 1988, the Air Force and Northrop Corporation rolled out the first B-2 stealth bomber before a select group of spectators and media (see Fig. 1.1). The event captured the interest of scientists, politicians, media and the public as they all became privy to the first glimpses of the zenith in aircraft technology. For 15 years the stealth's development and capability had been shrouded in secrecy, known in the military-industrial complex as the "black" world. As long as it remained in this "black" world, the flying-wing aircraft had been protected from controversy, from public debate and, for the most part, from media coverage.

The Events

A series of events in 1988 pulled back the curtain on the stealth aircraft bringing it into full light (see Table 1.1). Afterward the B-2 was exposed to public scrutiny via the media. The artist's conception of the B-2, the release of information about

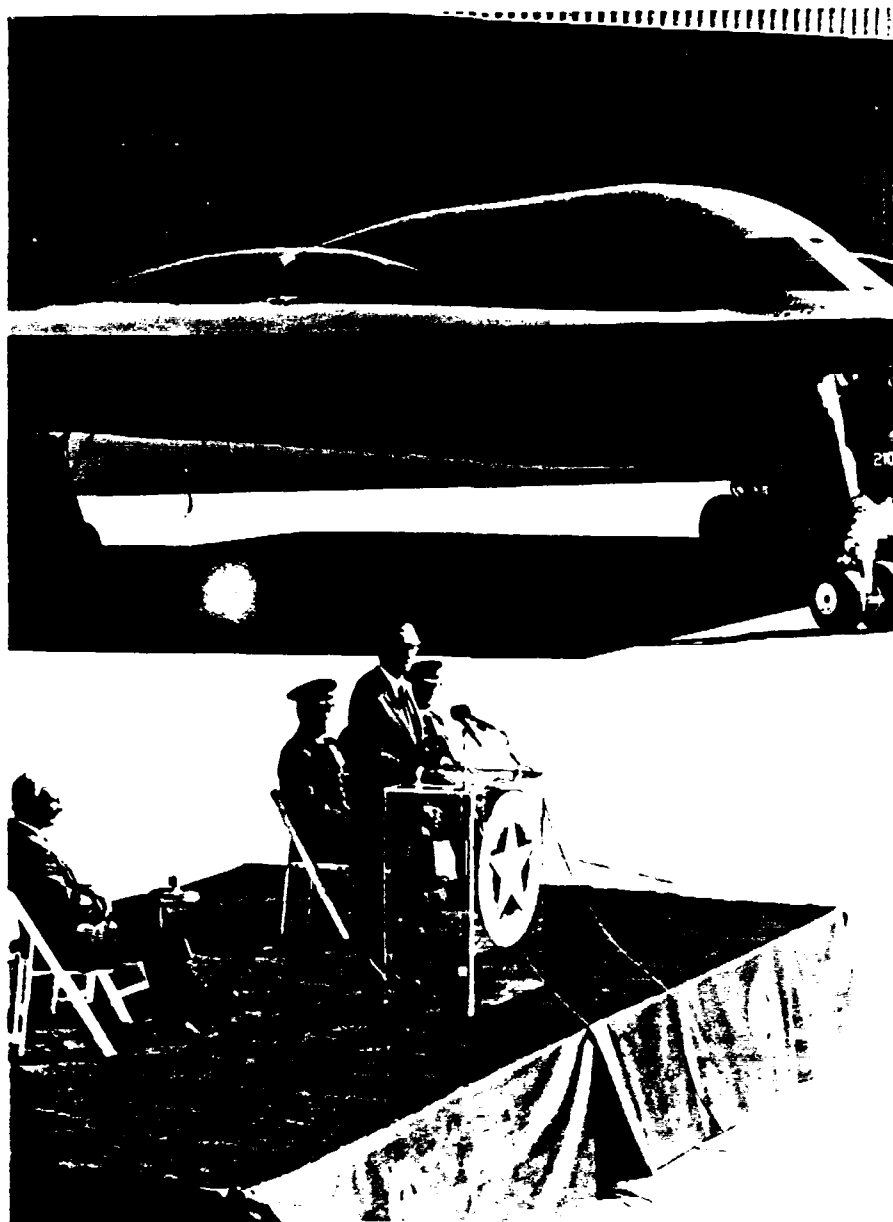


Figure 1.1 Former Northrop chief executive officer Thomas Jones addresses an elite group of military, congressional and media representatives at roll-out ceremony for B-2 on Nov. 22, 1988. Seated from left to right are former Secretary of the Air Force "Pete" Aldridge; General Larry Welch, Air Force chief of staff; and General John Chain, commander-in-chief of Strategic Air Command. U.S. Air Force photo.

Table 1.1
Significant Events

Date	Event
1980	Former Senator Barry Goldwater publicly acknowledges stealth program
Jan 1987	Initial Funding for stealth program released (\$22.4 billion)
Jan 1988	Northrop's contract for classified program is released
Apr 1988	Artist's concept with general shape of B-2 released
Aug 1988	B-2 roll-out announced for October
Nov 22, 1988	First B-2 rolled out at Palmdale, Calif. (delayed until after elections)
Dec 1988	Cost of B-2 program updated by Air Force Secretary Aldridge (\$68.8 billion)
Apr 1989	B-2 program cost updated (\$70.2 billion)
May 1989	Defense Acquisition Board Reviews B-2 funding
May 11, 1989	First ground run engine test of B-2
Jul 10, 1989	First taxi test of B-2
Jul 17, 1989	First flight of B-2
Jul 24, 1989	Congress begins budget and B-2 debates
Aug 17, 1989	Second flight of B-2
Aug 26, 1989	Third flight of B-2*

* After the 3rd flight, no media were allowed to cover flight testing. The media were provided an after-the-fact news release concerning the flight.

the \$22.4 billion spent on developing the B-2, public testimonies about the B-2 before Congress, and finally the roll-out generated a multitude of stories in daily, weekly and monthly publications as well as many hours of broadcast news. For example, from January 1988 to December 1989, the Washington Post carried 388 articles mentioning the stealth bomber. In broadcast journalism one event, the bomber's first flight on July 17, 1989, generated 40 minutes and 45 seconds of air time on that date for the Cable News Network (see Fig 1.2).

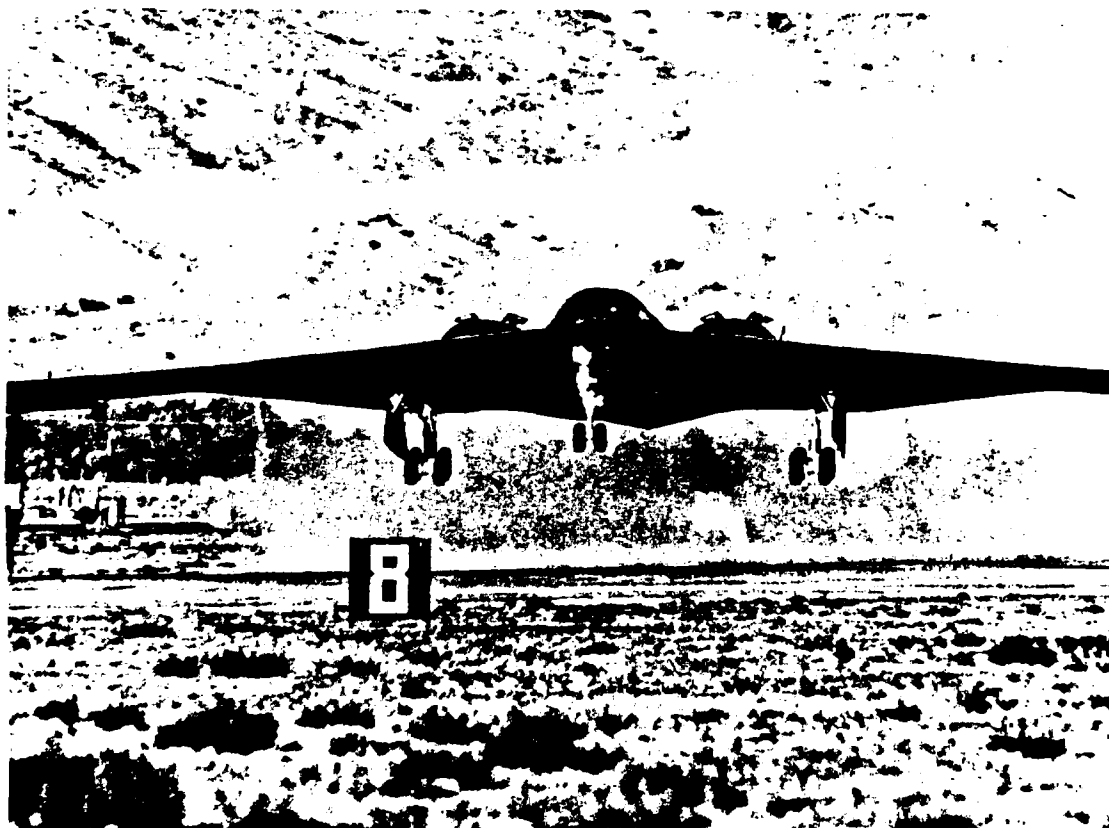


Figure 1.2 The B-2 lands at Edwards Air Force Base, Calif. for the first time after its maiden flight on July 17, 1989. U.S. Air Force photo.

The Impact

In today's world of high technology the introduction of state-of-the-art aircraft like the stealth bomber impacts not only the scientific community but also the "average" citizen in many ways. Therefore, the manner in which the media report scientific accomplishments like this weapon system may influence the public's perception of the issues.

Dorothy Nelkin states in Selling Science,

The press should provide the information and the understanding that is necessary if people are to think critically about decisions affecting their lives. For most people the reality of science is what they read in the press.¹

In addition, Bernard Cohen has determined that

the press is significantly more than a purveyor of information and opinion. It may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about.²

No matter which medium the American public selected--broadcast or print--the media produced information to allow the "average" person to think about the B-2. A case in point is provided by a public opinion poll taken between December 10 and 13, 1988, a month after the B-2's roll-out. The Roper Center conducted a national telephone survey of 1,000 registered voters and asked about the B-2. The question was:

The last weapons systems are the B-1 and B-2 bombers, the first completely new bombers in decades. We just built 100 B-1s, but we need 9 billion dollars more to get them working better. Should we go ahead with the 9 billion dollar B-1 improvement program or the proposal to build 131 B-2s for 55 billion dollars, go ahead with both, or neither?³

Their findings were that 27 percent of the people surveyed wanted the B-2, 18 percent wanted the B-1, 16 percent wanted both bombers, 25 percent wanted neither, 13 percent did not know and one percent refused to answer. In other words, 43 percent of the people surveyed thought the country needed the B-2 and 25 percent disagreed. Only 14 percent expressed no opinion about the B-2. Therefore, if this survey is an accurate depiction of the American public at that time, then it would appear that the majority of the people had thought about the B-2.

Since the stealth bomber's roll-out, the press has examined every angle of the aircraft from its flying-wing technology to its radar-evading capabilities, and scrutinized its political implications. Recent geopolitical factors, such as the crumbling of the Berlin Wall and the decline of communism in Eastern Europe, multiplied the bomber's significance as a bargaining chip. These countries' changes have revolutionized world culture bringing peace negotiations and arms reduction talks, which have

a direct impact on future production of the B-2 (see Fig. 1.3). Within this new framework the B-2 had been

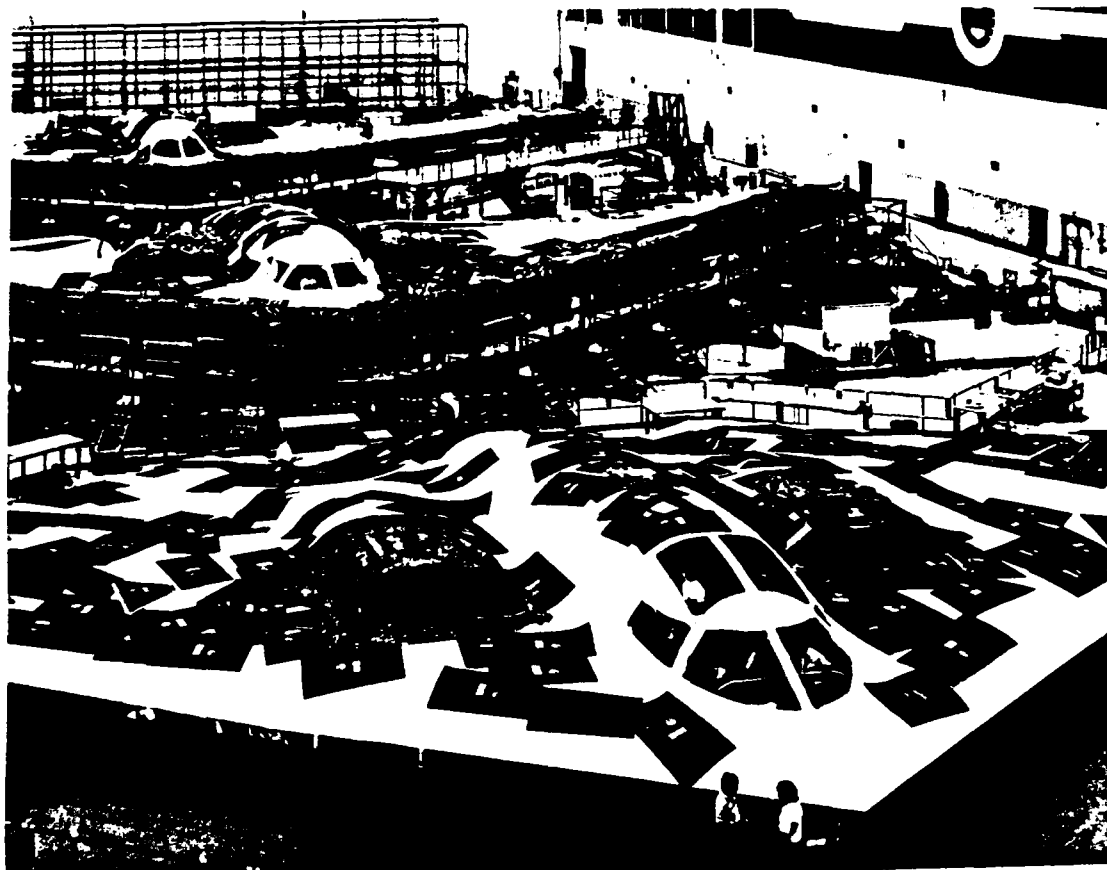


Figure 1.3 B-2s are produced at Plant #42, a converted automotive plant, near Palmdale, Calif. U.S. Air Force photo.

re-evaluated by the mass media and reduced to a pawn for congressional debates. In the apocalyptic words of Representative Patricia Schroeder, a Colorado Democrat, "the B-2 would be the first casualty of the Berlin

Wall."⁴ She predicted a reduction in the number of planes to be produced as well as a diminishing of funds allocated by Congress.

Funding for all 132 B-2s, reportedly a \$70 billion project, became a Congressional issue. In some cases the tremendous cost of the program resulted in what was labelled the "sticker shock" syndrome. Although most people cannot relate to the plane's \$530 million price tag, they can comprehend the significance of their tax dollars being spent for it. For this reason, the "sticker shock" may have been a factor used by reporters to "color science issues" because otherwise their articles may have been without inherent reader appeal as indicated by Carroll Glynn and Albert Tims's research.⁵ Their case study of sensationalism in science revealed that the media may sensationalize certain aspects of controversial issues merely to meet audience needs.

The Theory

Nevertheless, Deni Elliott claims that it is "the responsibility of the U.S. mass market press to tell citizens what they need to know to make intelligent decisions for self-governance."⁶ In accomplishing this task the media can set the agenda for political and science-policy issues.⁷ The concept

of setting society's agenda has been described by Donald Shaw and Maxwell McCombs as "the ability of the media to influence the salience of events in the public mind."⁸ Shaw and McCombs further explained this postulate as "a positive relationship between what various communication media emphasize and . . . as an inevitable by-product of the normal flow of news."⁹

The powerful relationship between the media and the public is evident not only in agenda setting but also in what Denis McQuail labelled the social-cultural theory. McQuail views the mass media as

a power resource--a means of control, management and innovation in society, which can substitute for force or other resources. . . . They have become a dominant source of definitions and images of social reality for individuals, but also collectively for groups and societies . . .¹⁰

Agreeing that the ultimate result is that of control, James Carey postulates that the basis of one tradition of American scholarship interrelates the media's messages into "a transmission or transportation view of communication." Carey describes the theory as the transmission of information, which controls the message society receives. In this manner a culture is persuaded or is changed by its attitude, behavior or socialization.¹¹

Evidence of belief in a transmission theory can be seen in the opinions of some military leaders. General

John Chain, commander-in-chief of the Strategic Air Command, agrees that the media--specifically newspapers--are powerful tools in our society. While Chain may speak to several civic organizations each year, the number of people he reaches is miniscule compared to one article written by Bob Woodward in the Washington Post.¹² Likewise, General Larry Welch, the Air Force chief of staff, notes that his audiences collectively are only a fraction of the number of people that Dan Rather of CBS reaches in one night.¹³ Although Welch speaks to more civic groups than anyone else in the Air Force, all of his and other Air Force general officers' audiences combined would not equal to the audience reached by one of Rather's broadcasts. Rather and Woodward may tell people what to think about by transmitting information to large audiences, but they also may influence how the information is transmitted.

Focus of Study

Therefore, this study focused on a second matter. The second question is, "In what direction was the coverage?" Did the media convey their messages according to Klaus Krippendorff's definition of "favorable and unfavorable attributes of a symbol, idea, or subject matter [which] tends to be interpreted

as a measure of the direction or bias?"¹⁴ Although much research has been conducted to analyze newspapers biases,--for example, Sharon Friedman et al. coverage of Chernobyl,¹⁵ Tsan-Kuo Chang's study of Reagan's China Policy,¹⁶ Terri Schultz-Brooks' investigation of American press and President Mitterrand¹⁷ and Deborah Barranco and Leonard Shyles' "aggrandizement" of the New York Times,¹⁸--none has focused on a specific military topic like the B-2. To determine if the messages were directional, this study focused on stories from three elite national newspapers. The research was based in part on Lewis Donohew's study of newspaper gatekeepers, which used paragraphs as the unit of analysis for rating them as "favorable," "unfavorable," or "neutral."¹⁹ Additionally, the thematic content of each story was derived from James Halloran, Philip Elliott and Graham Murdock's content analysis of press coverage of the Vietnam War demonstration in London Oct. 27, 1968.²⁰ By analyzing all the "news" articles in the Los Angeles Times, the New York Times, and the Washington Post for a 13.5 month period, this study demonstrated the direction of B-2 press coverage.

In responding to newspaper accounts of these issues, some Air Force officials, like General Robert

Herres, former vice chairman of the Joint Chiefs of Staff, accuse the media of cultivating "in the minds of the public the expectations of a perfect system when we are constantly pushing the state-of-the-art in everything we build."²¹ Therefore, it is not just the information that is transferred to the public, but also how the message is presented by the media--whether it is favorable or unfavorable.

Media coverage of the stealth bomber is of particular importance because it encompasses scientific and political issues, which are of particular importance in today's culture. Whether one sees the media's effect as one of "transmission" or one of providing information upon which the public bases its decisions, it is important to know not only what issues are utmost in the media's coverage but also how those issues are covered.

NOTES--CHAPTER # I

¹ Dorothy Nelkin, Selling Science: How the Press Covers Science and Technology, (New York: Freeman & Co., 1987) 2.

² Bernard C. Cohen, The Press and Foreign Policy, (Princeton: Princeton U. Press, 1963) 13.

³ The Roper Center Survey, Market Opinion Research, "Americans Talk Security #12," (Dec. 10-13, 1988).

⁴ Rep. Patricia Schroeder. Personal interview. 19 Dec. 1989.

⁵ Carroll J. Glynn and Albert R. Tims, "Sensationalism In Science Issues: A Case Study," Journalism Quarterly, 59 (1982): 126-131.

⁶ Deni Elliott, "Tales from the Darkside: Ethical Implications of Disaster Coverage," Lynne M. Walters, Lee Wilkins, and Tim Walters, Bad Tidings: Communication and Catastrophe, (Hillside, NJ: Lawrence Erlbaum Assoc. Pub., 1989) 162.

⁷ Lee Wilkins, Shared Vulnerability: The Media and American Perceptions of the Bhopal Disaster, (Westport, CT: Greenwood Press, 1987) 28.

⁸ Donald L. Shaw and Maxwell E. McCombs, The Emergence of American Political Issues: The Agenda-setting Function of the Press, (St. Paul: West, 1977) 5.

⁹ Ibid. 11.

¹⁰ Denis McQuail, Mass Communication Theory: An Introduction, (London: Sage, 1987) 3.

¹¹ James W. Carey, "Mass Communication Research and Cultural Studies," ed. James Curran, Michael Gurevitch and Janet Woollacott, Mass Communication and Society, (Beverly Hills: Sage Pub., 1979) 412.

¹² General John Chain. Personal Interview. 2 Nov. 1989.

13 General Larry Welch. Personal interview. 17 Dec. 1989.

14 Klaus Krippendorff, Content Analysis: An Introduction to Its Methodology, (Beverly Hills: Sage, 1980) 40.

15 Sharon M. Friedman, Carole M. Gorney, and Brenda P. Egolf, "Reporting on Radiation: A Content Analysis of Chernobyl Coverage," Journal of Communication, Summer (1987): 58-79.

16 Tsan-Kuo Chang, "How Three Elite Papers Covered Reagan China Policy," Journalism Quarterly, 61 (1984): 429-432.

17 Terri Schultz-Brooks, "American Press Coverage of President Francois Mitterrand," Gazette, 39 (1987): 103-122.

18 Deborah A. Barranco and Leonard Shyles, "Arab vs. Israeli News Coverage in the New York Times, 1976 and 1984," Journalism Quarterly, 65 (1988): 178-181.

19 Lewis Donohew, "Newspaper Gatekeepers and Forces in the News Channel," Public Opinion Quarterly, 31, 1 (1967) 61-68.

20 James D. Halloran, Philip Elliott, and Graham Murdock, Demonstrations and Communications: A Case Study, (Middlesex, England: Penguin, 1970)

21 General Robert Herres. Personal interview. 16 Nov. 1989.

CHAPTER II

LITERATURE REVIEW

Perhaps some advance in culture, like the use of a new weapon, had given them the feeling of superiority.

Sigmund Freud

Introduction

In 1922 Walter Lippmann, the dean of American pundits, wrote one of the first books on the development of public opinion. His supposition was based on the importance of "pictures in our heads" that represented individuals' opinions upon which people acted.¹ Although his book, Public Opinion, was concerned with how public opinion crystallizes into a national will, Lippmann made an analogy between the opinion choices we have to a map designed to predetermined specifications. According to Bernard Cohen, the map-makers are the press, which he defines as newspapers, excludes other media from this term. However, because of "a general tendency to regard the news as objective or factual and hence to think of the possible impact of the press largely in terms of editorial persuasions,"² we tend to overlook this "map-making" function of the press. Whether the media conjure pictures in people's heads or produce maps for

us to follow, there is a distinct relationship between the press and society.

In reporting complex issues that revolve around national policy or lie in the political-scientific arena, as does the stealth bomber, the media appear to have more influence or control of the public's pictures and maps. Donald Shaw and Maxwell McCombs observed,

our knowledge of political affairs is based on a tiny sample of the real political world. That real world shrinks as the news media decide what to cover and which aspects to transmit in their reports, and as audiences decide to which news messages they will attend.³

Similarly, Dorothy Nelkin's inquiry of science and technology noted that

by their selection of newsworthy events, journalists identify pressing issues" [which] "focus on controversial issues . . . forcing policy-makers to justify themselves to a larger public. By their use of images . . . they help to create the judgmental biases that underlie public policy.⁴

Public policy is the backbone of the military, especially in the development of new weapon systems. Therefore, this study assumes that there is a distinct relationship among politics, media, and society. Using the B-2 stealth bomber, a controversial and political issue, as the pivot, this thesis examined what was on the media's agenda and how it may be related to the congressional and military agendas. Hence, those with political power may have conveyed certain messages to

the media, which were in turn transmitted to the public. The examination of media coverage of the B-2 bomber is concerned with the transmission of messages for control, which is what James Carey calls the most common view of communication in our culture.⁵

The Theory: Cultural

Claude Levi-Strauss, defines culture as

a fragment of humanity which, from the point of view of the research at hand and the scale on which the latter is carried out, presents significant discontinuities in relation to the rest of humanity. . . . The same set of individuals may be considered to be parts of many different contexts: universal, continental, national, regional, local, etc., as well as familial, occupational, religious, political, etc. This is true as a limit; however, anthropologists usually reserve the term 'culture' to designate a group of discontinuities, which is significant on several of these levels at the same time.⁶

On the other hand, Stuart Hall explains a more reflective and inter-woven model that defines

'culture' as both the means and values which arise amongst distinctive social groups and classes, on the basis of their given historical conditions and relationship, through which they 'handle' and respond to the conditions of existence.⁷

Hall derives much of his paradigms from Raymond Williams, Richard Hoggart and E. P. Thompson, who stressed "lived experience and concrete cultural practices."⁸ However, the cultural approach to mass communications theory integrates the anthropological

idea of culture within the context of power or influence that may be exerted on a given society.

Denis McQuail recognizes the media as a source of power in his social-cultural approach. McQuail states that the mass media

have become a dominant source of definitions and images of social reality for individuals, but also collectively for groups and societies; they express values and normative judgements inextricably mixed with news and entertainment.⁹

Therefore, within a given culture, the media are viewed as an institution or subsystem, which contributes to a society through a transmission of messages. One American presumption is what James Carey calls the transmission or transportation view of communication. Although he subscribes to a more ritualistic concept, which is the preponderant thought in Europe, Carey equates American communication studies to the manner in which transportation extended "influence, control, and power over wider distances and over greater populations" in the nineteenth century.¹⁰ Accordingly, the American view of transmission is grounded in geographical control where the European's ritual view is centered on fellowship and commonalty. However, the power of a culture, Carey says is "the opiate of the people, the hypodermic needle, the product of the environment."¹¹

In his discussion of societal risk involved with nuclear energy, Russell Shain denoted news as part of a cultural framework where people give it meaning.¹² Although news is only one aspect within the cultural framework, Shain explained that Carey's view of the transmission or transportation concept may be limiting. To explain further the complexities of this cultural phenomenon, Shain employed Carey's ritualistic points to comprehend the message's meaning within the culture. Stuart Hall placed this indissoluble relationship between elements and social practices as "a way of life" that gives culture its meaning. His elements could be described as news content and the social practices as people's perceptions. Thus, the cultural theory is rooted in not only the messages that are transmitted by the media, but also in the public's perceptions, which are within a cultural subsystem.

The media create maps for the public to follow through the flow of information. Carey described this map-making process as the symbols expressed by a parent giving directions to a child. Although the child may have been to school many times, the first time he or she makes the journey alone, the parent may "map-out" the route. Thus, the information is transmitted through familiar symbols to the child.¹³ In society as

Lippmann specified, the map-makers are not our parents but the media. The media create the ideas and images in their audiences' heads and set their agendas. Symbols are used to transfer certain messages within a given context and, therefore, set the agenda for society.

The Theory: Agenda-Setting

The term "agenda-setting" was coined by Donald Shaw and Maxwell McCombs, who define it as "the ability of the media to influence the salience of events in the public mind."¹⁴ Shaw and McCombs verified this axiom with their study of the 1968 presidential election, but cite Theodore White's The Making of the President, 1972, as a more recent example of how the press uses its power to set the agenda for public discussion. From these examples Shaw and McCombs determined that "agenda-setting asserts that audiences learn saliences from the news media, incorporating a similar set of weights into their personal agendas."¹⁵ Bernard Cohen termed this function of the media "map-making" because "if we do not see a story in the newspaper (or catch it on radio or television), it effectively has not happened so far as we are concerned."¹⁶

According to Michael Gurevitch and Jay Blumler, the media derive their power for setting the political

agenda from three types of sources. First, the structural root allows the media to provide the politician with an audience unavailable otherwise both in size and composition. Second the psychological root is imbedded with an incredible amount of trust for the politician from the audience. Third, the normative root legitimates the media's role in politics. Therefore, the media "set much of the agenda of political debate. . . . They affect the changes of governments and other political actors to secure essential supports."¹⁷

In studying an issue saturated with political overtones--such as the B-2 bomber--how the media derive their power is consequential. As Shaw and McCombs pointed out, we depend on the media for our political news messages.¹⁸ Since there is a presumed relationship between the media and the political structure from where they derive their power, then the messages the public receives are affected by this power. Therefore, the agenda-setting theory presupposes that the public's agenda is established by a political power via the media. Carey states that in the cultural theory this power was derived from motives precipitated by political and mercantilistic movements.¹⁹ In other words, what was important to the

political powers that be, was transmitted to the media who devised the maps and images in society's heads.

Carey defines news as "a form of culture invented by a particular class at a particular point of history."²¹ He further explains how the newspaper has become the instrument for disseminating news and knowledge over great distances while simultaneously delivering a particular view of the world. The newspaper has become not only the conveyor of the news but also has become a component of culture. Besides purveying the culture, some newspapers are considered the nation's historical account of events. For example, the New York Times has been labelled as America's "newspaper of record" by Bernard Cohen,²¹ Deborah A. Barranco and Leonard Shyles,²² and Lee Wilkins²³ in previous studies.

Other Studies

Newspapers are historically credited with setting society's agenda by their coverage of certain topics. Wilkins found in her study that even after the Bhopal accident had faded from the media's agenda, it remained vivid in the memory of many people.²⁴ To understand how the media's agenda was set, the kind of coverage by three elite newspapers of the B-2 at a given time was considered in this research. Using

previous research as a model, a directional analysis was designed to interpret the bias of the sample newspapers in Klaus Krippendorff's terms of "favorable and unfavorable attributes."²⁵ Lewis Donohew used a similar method in his assessment of newspaper stories about the administration's bill for Medicare.²⁶ Donohew was interested in how the newspapers had portrayed the Medicare Bill and investigated the direction of specific themes found in the articles he analyzed.

Donohew and Krippendorff termed bias as directional interpretation, but Frank Sorauf defined it as a conscious effort in which "the message misinterprets or misconveys the reality."²⁷ Although Sorauf asserted that media bias is a permanent part of the institution and won't go away, he contends that bias is the very root of the American newspaper. Sorauf examined three elite newspapers--the New York Times, the Los Angeles Times, and the Washington Post--for their coverage of America's political campaign money. He found that even though the media are biased, newspapers bring "a particular understanding to the events and relationships in American politics and to the ways of influence and decision making in American government." Terri Schultz-Brooks' study found four

major areas that reflected newspaper bias. Briefly those areas were: 1) negative presentation of facts, 2) omission of information, 3) change in direction of reporting and 4) lack of balance in essays and editorials.²⁸ Nevertheless, the direction in which media convey an issue can translate into how the audience perceives the subject.

Other investigations into directional analyses were conducted by Jane Blankenship, et al.,²⁹ Abbas Malek,³⁰ Tsan-Kuo Chang,³¹ and Louise Montgomery.³² Blankenship, et al., focused their study on 31 editorials, which they used to glean data concerning Geraldine Ferraro's image as a vice-presidential candidate. Using statements that compared Ferraro with others and judged her selection, Blankenship, et al., coded the statements as "favorable," "unfavorable," and "mixed." Their findings revealed that although doors were opened by Ferraro's nomination, editorial policy did not express these possibilities. Malek's content analysis involved evaluating categories of issues as "favorable," "unfavorable," or "neutral." By reviewing articles from three time periods, Malek ascertained the change in editorial policy for the New York Times toward Iran. Chang's inquiry into press coverage of President Reagan's China policy indicated most of the

coverage by the New York Times, the Los Angeles Times, and the Washington Post was negative. From this indication, it was assumed that the media coverage may have lead Reagan to modify his policy. Therefore, the media's agenda was reflected in Reagan's policy. Using Latin American newspapers, Montgomery analyzed how America's image was depicted in 19 countries. The images were described as positive, neutral or negative, similar to previously mentioned studies. These studies demonstrate how the media set the agenda in specific cases.

Barranco and Shyles's research analyzing the New York Times for "aggrandizement" of Mideast issues also serves as an example of how subtle news biases are manifested in headlines.³³ Since headlines are considered a summary of the body, they used a "headline proper mention" measure to count the frequency of Mideast countries listed in headlines. The frequency determined the extent of coverage of the Mideastern country, which was interpreted as a bias toward that country. Another type of bias was explored by Karen Johnson.³⁴ Assuming that the media give a president a "grace" period immediately after election, Johnson's study attests that the positive-neutral tone is dependent upon the type of stories published.

Conclusion

The "bias" or "direction" of stories can describe how a newspaper covered a particular issue, like the B-2. In addition, the kind of coverage at a given time can provide direction because it can reflect the issue's prominence on the media's agenda. Since the media are the map-makers for the images formed by the American public, the media coverage of the B-2 bomber becomes a powerful tool for decision-making in our society. As John Kowal explains, "The possession and dispensing of news and information is an important form of power."³⁵

When the American public contemplates a highly complex and technological proposition, such as the B-2 bomber, most people rely on the media for information. As Cohen, Carey, and Shaw and McCombs have stated, the media, specifically newspapers, are ingrained in the American way of life as a powerful institution. Information reported by the press becomes important to the people who read about it. As the conduit of information, the press possesses the control of not only the "images in our heads," but also how the images are formed. Therefore, this study looked at what Congress and the military leaders said about the B-2 and the

direction of the coverage of the B-2 by three elite newspapers.

NOTES-CHAPTER II

- ¹ Michael Emery and Edwin Emery, The Press and America: An Interpretive History of the Mass Media, Sixth Ed., (Englewood Cliffs, NJ: Prentice Hall, 1988) 349.
- ² Bernard C. Cohen, The Press and Foreign Policy, (Princeton: Princeton U. Press, 1963) 12.
- ³ Donald L. Shaw and Maxwell E. McCombs, The Emergence of American Political Issues: The Agenda-Setting Function of the Press, (St. Paul: West, 1977) 7.
- ⁴ Dorothy Nelkin, Selling Science: How the Press Covers Science and Technology, (New York: Freeman & Co., 1987) 80.
- ⁵ James W. Carey, Communication as Culture: Essays on Media and Society, (Boston: Unwin Hyman, Inc, 1989) 15.
- ⁶ Claude Levi-Strauss, Structural Anthropology, trans. Claire Jacobsen and Brooke Grundfest Schoepf, (New York: Basic Books, 1963) 295.
- ⁷ Denis McQuail, Mass Communication Theory: An Introduction, 2nd ed., (London: Sage, 1987) 67.
- ⁸ Richard Collins, James Curran, Nicholas Garnham, Paddy Scannell, Philip Schlesinger and Colin Sparks, Media Culture & Society: a critical reader, (London: Sage, 1986) 7.
- ⁹ Ibid. McQuail. 3.
- ¹⁰ James W. Carey, "Mass Communication Research and Cultural Studies: An American View," James Curran, Michael Gurevitch and Janet Wollacott, Mass Communication and Society, (Beverly Hills: Sage, 1979) 412.
- ¹¹ Ibid. Carey. Communication As a Culture. 52.

12 Russell E. Shain, "It's the Nuclear, Not the Power and It's in the Culture, Not Just the News," Lynne M. Walters, Lee Wilkins, and Tim Walters, Bad Tidings: Communication and Catastrophe, (Hillside, NJ: Erlbaum Assoc. Pub., 1989) 151.

13 Ibid. Carey. Communication as Culture. 26-27.

14 Ibid. Shaw. 5.

15 Ibid. 11.

16 Bernard C. Cohen, The Press and Foreign Policy, (Princeton: Princeton U. Press, 1963) 13.

17 Michael Gurevitch and Jay Blumler, "Linkages Between the Mass Media and Politics: a model for the analysis of political communications systems," James Curran, Michael Gurevitch and Janet Wollacott, Mass Communication and Society, (Beverly Hills: Sage, 1979) 282.

18 Ibid. Shaw and McCombs.

19 Ibid. Carey. Communication as Culture. 16.

20 Ibid. 21.

21 Ibid. Cohen. 12.

22 Deborah A. Barranco and Leonard Shyles, "Arab vs. Israeli News Coverage In the New York Times, 1976 and 1984," Journalism Quarterly, 65 (1988): 178-181.

23 Lee Wilkins, Shared Vulnerability: The Media and American Perceptions of the Bhopal Disaster, (New York: Greenwood, 1987) 54.

24 Ibid. 118.

25 Klaus Krippendorff, Content Analysis: An Introduction to Its Methodology, (Beverly Hills: Sage, 1980) 40.

26 Lewis Donohew, "Newspaper Gatekeepers and Forces in the News Channel," 61-65.

27 Frank J. Sorauf, "Campaign Money and the Press: Three Soundings," Political Science Quarterly, 102-1: (1987) 25-42.

28 Terri Schultz-Brooks, "American Press Coverage of President Francois Mitterrand," Political Science Quarterly, 39 (1987): 103-122.

29 Jane Blankenship, Serefa Mendez-Mendez, Jong Guen King and Joseph Giodan, "Initial Construction of Ferraro In Newspaper Editorials," Journalism Quarterly, 63-2 (1986): 378-382.

30 Abbas Malek, "New York Times' editorial position and the US foreign policy: The Case of Iran," Gazette, 42 (1988): 105-119.

31 Tsan-Kuo Chang, "How Three Elite Papers Covered Reagan China Policy," Journalism Quarterly, 61 (1984): 429-432.

32 Louise F. Montgomery, "Images of the United States in the Latin American Press," Journalism Quarterly, 65 (1988): 655-660.

33 Ibid. Barranco and Shyles.

34 Karen Johnson, "The Honeymoon Period: Fact or Fiction?" Journalism Quarterly, 62 (1985): 869-876.

35 John Paul Kowal, "Responsible Science Reporting in a Technological Age," Journal of Technical Writing and Communication, 10 (1980): 307-314.

CHAPTER III

METHODOLOGY

Introduction

The growing importance of science in our society and its increasing dependence on the taxpayers' support makes it a duty of the scientist to cooperate with the science writer in educating the public. Unless reputable scientists supply accurate information to the popular media, the public is left at the mercy of charlatans, the sensationmongers, and of exposes by the anti-intellectuals. Science plays a vital role in our technologically developed society and it is important for citizens to understand something about it in order to make wise decisions.¹

Thus wrote Dr. Neal E. Miller in the Scientists' Institute for Public Information's The Scientist's Responsibility for Public Information, a handbook to help scientists communicate with the media.

The importance of communicating accurately to the public is fundamental in any area. But in politically sensitive and highly technical fields, such as the B-2 bomber, the direction or bias in which the message is transmitted is crucial. Decision makers as well as the general public rely on information in articles and reports about scientific and technological discoveries. The media have a responsibility to keep the public informed of advancements and their political implications, but more compelling is the need for

providing messages with accurate images. Kowal explains this responsibility for science writers as "more than most journalists, [they] will have the responsibility to provide the information necessary for the great public policy debates that await us in the Technological Age."²

For 15 years the B-2 bomber was kept from public debates because it was a classified program. However, once it emerged from the "black" world the airplane became the topic of many heated Congressional debates, according to 1989 Congressional records. The debates were not limited to the floor of Congress; they appeared on the sheets of the nation's leading newspapers. The messages and images of the stealth portrayed by the media not only set the public's agenda, but also represented the importance of the issue in the political arena.

The press has been established as a powerful institution within our society by communication theorists such as Bernard Cohen, James Carey, Denis McQuail, Donald Shaw and Maxwell McCombs. Cohen described the press as "the fourth branch of government."³ James Carey extended this power in communication to political entities as a means of control.⁴ McQuail signifies that not only are the media powerful, but also they are a "dominant source of definitions and images of social reality for individuals."⁵ Shaw and McCombs explained the agenda-

setting power of the press as a building process that encompasses how we learn about social, political and economic problems.⁶ Therefore, how the press transmits its messages and in what context they are transmitted is tantamount. This study, which focused on two aspects of the media's role with society, was conducted in two parts. A content analysis of the agenda set by three elite newspapers and their treatment of the coverage of the B-2 bomber provided the quantitative investigation. The qualitative analysis consisted of interviews with political and military leaders involved with the stealth bomber.

The Research Questions

For the quantitative study there were two research questions. They were:

RQ 1: What was the agenda set by three elite newspapers--the New York Times, the Los Angeles Times, and the Washington Post-- from November 20, 1988, until December 31, 1989?

RQ 2: What was the newspapers' treatment of the B-2 bomber?

First, this research was concerned with the agenda set by the press. In considering the agenda set by the media, it was hypothesized that because the B-2 bomber was important to members of Congress and the military, subsequently, the bomber was important to the media. Through extensive reporting on the B-2 bomber's price, construction, roll-out, flight schedule, and Congressional debates, the press kept the aircraft in the public eye. Second, the direction of the coverage was investigated. In reporting on a complex issue like the B-2, the press must simplify the technology and politics for the "average" citizen to make intelligent decisions. Mindful of this, the press may have conveyed their messages in a specific direction. Klaus Krippendorff defines this direction as "favorable and unfavorable attributes of a symbol, idea, or subject matter [which] tends to be interpreted as a measure of the direction or bias."⁷

Under the second research question, the treatment of the B-2 refers to the direction or bias of each article. In other words, were the stories "favorable," or "unfavorable?" Even though the three newspapers have many similarities, their geographic locations may have varied their coverage. For example, because Northrop's headquarters and plant, and the Air Force flight testing

base are near Los Angeles, the Los Angeles Times' articles may be expected to be more favorable. On the other hand, the Washington Post, which relies heavily upon congressional sources, may be expected to have more unfavorable articles. The New York Times, because it is considered the least biased by military officials, may be more neutral in reporting on the B-2. Second, there would be a difference in the treatment of the B-2 in separate sections of the newspapers. For example, the business section's direction may emphasize economic aspects of the B-2 and the metro's bias may be more political. The national desk, which would include the majority of the articles, might be more neutral because of a wider range of topics that it would include.

Operational Definitions

Although the agenda-setting theory of communications has been addressed, the term **agenda** has not been defined. According to Donald Shaw and Maxwell McCombs, the originators of the phrase agenda-setting, the agenda is whatever the "news media determine the important issues."⁸ By this description, Shaw and McCombs were explicating the successfulness of the media in telling society what to think about. Similarly, Tsan-Kuo Chang identified the press's agenda in her study about Reagan's China policy as "emphasis on specific

problems or issues in the newspapers' coverage."⁹ The frequency, along with the number of and length of stories published by three national newspapers about the B-2 stealth bomber is an example of how the media told the public to think about the B-2. Although this study did not compare the B-2 with other issues, the research included what the agenda was for the press and how the media treated the stealth bomber.

Treatment is defined by referring to previously mentioned studies, which interpret it as "bias" or "direction." McQuail designates bias as "a consistent deviation in a particular direction."¹⁰ But bias can be unwittingly due to organizational tendencies, occupational practices and technical limitations.¹¹ Still, the bias here was limited by the direction in specific thematic stipulations similar to Lewis Donohew's study of Medicare. Direction was defined by Donohew in terms of categories, which classified "kinds of action" or "statements" as "favorable," "unfavorable," and "neutral."¹²

In the most austere connotation, news is simply the reporting of an event. Lee Wilkins designated news as an orienting, contextual and ritualistic part of our cultural process.¹³ James Carey called news a "historic reality" that is not just information, but also drama.¹⁴

For this study, **news articles** were limited to those that referred to the B-2 stealth bomber and events about it. Specifically, editorials, opinions, letters-to-the-editor, columns, and sports articles that mentioned the stealth bomber were eliminated from the sample. Therefore, all other articles that mentioned "stealth bomber," even if it was only once, were coded for the sample.

Since this study pertains to a thematic measure of news articles, the paragraph was used as the unit of analysis because it is easily definable. Webster's New Collegiate Dictionary's primary definition of a **paragraph** is: "a subdivision of written composition that consists of one or more sentences, deals with one point or gives the words of one speaker, and begins on a new usu. indented line."¹⁵ In previously mentioned studies, Donohew and Chang used the paragraph as a recording unit for their thematic approach for conducting a directional content analysis.

Content Analysis

The content analysis method of research was chosen because it is a "research technique for making replicable and valid inferences from data to their context."¹⁶ Rodger Wimmer and Joseph Dominick defined content analysis as systematic, objective and quantitative with

the goal being an "accurate representation of a body of messages."¹⁷ Using previous research as a model, a directional analysis was designed to interpret the bias of the sample newspapers in Klaus Krippendorff's terms of "favorable and unfavorable attributes."¹⁸ Many of the ideas for designing the coding sheet were derived from Donohew's Medicare study¹⁹ and James Holloran, Philip Elliott, and Graham Murdock's case study of a 1968 anti-war demonstration in London.²⁰

The Sample

Selection of the newspapers to be analyzed was a deliberate attempt to use national media that had been designated as "elite" or "prestigious" by previous researchers. The New York Times has been called America's "newspaper of record" by Cohen,²¹ Barranco,²² and Wilkins;²³ it has been analyzed by more researchers than any other newspaper; and it was mentioned by military leaders as the least biased. The Washington Post was selected because as Sharon Friedman, et al. says it "brings the political flavor of Washington, D.C."²⁴ The Los Angeles Times not only provided the West Coast flavor, but also had vested interests in the B-2. In addition, all three newspapers are ranked in the top ten nation-wide for circulation and many of their articles are reproduced in local and regional newspapers. These

newspapers are recognized as influential to the public, to the policy makers, and to other journalists²⁵; therefore, they would be more likely to "set the agendas" for the images and thoughts about the B-2 bomber.

Since the roll-out of the B-2 was a major event involving the bomber, this was the beginning point for selecting articles for analyzing. The ending point of the sample was determined by the calendar year and world events, such as the crumbling of the Berlin Wall, which may have a detrimental effect on the bomber's future. This time selection provided a manageable time-frame from which to cull articles and to analyze a recent collection of articles.

NEXIS, a computerized library of magazines, newspapers, and other periodicals, was used to cull articles from three newspapers. The terms "stealth bomber" were entered for sorting through the newspapers. When the term "B-2" was used for sorting, it was not as comprehensive as "stealth bomber" and it repeated the selection in a smaller quantity. All articles from November 20, 1988,--two days before the roll-out--through December 31, 1989, were requested from the computer library. From the 619 articles that resulted from this search, all but 365 were eliminated because they were either opinionated or did not refer specifically to the

aircraft. Editorials, columns, features, letters-to-the-editor, sports, opinions and artwork were rejected from this study to insure the articles fit the criteria of "hard news," as previously defined. From the New York Times, 103 articles were analyzed; from the Los Angeles Times, 162 were analyzed; and from the Washington Post, 100 were analyzed. A complete listing of the coded articles is in Appendix E.

To reduce the number of articles to be coded, a constructed month was attempted but proved inadequate for sampling. Using a computer, a random sampling of days was tried, but the resulting dates did not coincide with dates when articles were published. A list of all articles with their dates and days of the week was generated to sample every fourth article. However, this biased the dates according to the published dates and would not have furnished an accurate sampling. To insure the sample was not biased, all articles were evaluated.

Inter-coder Reliability Pretest

To verify inter-coder reliability a pretest was designed. The pretest also checked the reliability of the categories by insuring that they were mutually exclusive and definable by the coders. Three articles, one from each of the newspapers, were randomly selected from the sample universe and coded by four journalism

graduate students and one professor. No training was conducted prior to the coding and only basic instructions were provided. A copy of the letter of instruction to the pretest coders is in Appendix D. The lack of instructions and training was intentional to ascertain the inter-coder reliability using the coding sheet. Although the categories were mutually exclusive, coding the themes required a better understanding of the subject, which demanded training to achieve optimum results. For example, one of the problems annotated by a pre-test coder was personal interpretation of key terms that skewed the list of euphemisms. Because of the coder's connotation of the word "stealth," he discerned that this was a negative term. Another coder mentioned a lack of familiarity with the subject matter as a problem with determining the applicable category. A third coder noted that the instructions were not explicit enough to decide how each category should be marked.

The pretest also demonstrated a lack of inter-coder reliability. Adapting the Holsti formula for reliability for five coders the result was:

$$R = \frac{5 (C_1, C_2, C_3, C_4, C_5)}{C_1 + C_2 + C_3 + C_4 + C_5}$$

where 5 = the number of coders

and; $(C_1, C_2, C_3, C_4, C_5) =$ # of categories in
which coders agree
and; $C_1 + C_2 + C_3 + C_4 + C_5 =$ category assignments.

Although a 90 percent inter-coder reliability was desired, the pretest revealed 60, 67 and 70 percent for total reliability for each of the three articles. Again, a training session was needed to alleviate this inadequacy.

The Coding

Seven people were selected to code the 365 articles. Before any actual coding began, a training session was conducted. Using the same samples as the pretest, the training session included explanation of each category to be coded and examples of how the coding should be accomplished. After the training, the seven coders produced an 89.47 percent inter-coder reliability, which was satisfactory for the number of coders.

The coding sheet was divided into positive and negative statements, which described specific aspects affecting the B-2 bomber. A sample coding sheet with the totals from each category is in Appendix B. Categories included: the decline of communism, the B-2's mission, congressional statements about the B-2, the bomber's cost, Northrop's law suits, the number of bombers authorized, technology transfers to civilian aircraft or industry, the B-2's economic factor, the Soviet military

threat, statements by experts, external influence, military spending, and miscellaneous statements. Although some categories were more subjective than others, all categories were mutually exclusive for coding as favorable or unfavorable. Since the coding unit was the paragraph, for each category the coded paragraph must have been explicitly or implicitly about the B-2.

To assess the direction of the article, the following formula was used:

$$D = \frac{p - n}{T}$$

where D = direction;
 p = the number of positive themes in the
 article;
 n = the number of negative themes in the
 article;
 and T = the total number of themes found in
 the article.

If the concept of a particular category was not mentioned in the article, then that category was simply not coded. Hence, themes must be either negative (unfavorable) or positive (favorable) to be coded. However, the direction of a specific article could be unfavorable, favorable or neutral. The neutral rating of $D = 0$ could result from no codings or when the number of negative themes subtracted from the positive themes equalled zero.

In addition, euphemisms for the B-2 and adjectives describing the B-2 were listed under favorable, unfavorable and neutral headings on the coding sheet. The coding sheet also included peripheral information such as, the headline, the date and day, the byline, the section location, the story length in words, and the B-2's salience in the story. If the primary subject of the story was the B-2, then the story was coded as "dominant." If the B-2 was a minor part of the article, but was mentioned in two or more paragraphs, it was coded as "secondary." If "stealth bomber" appeared in only one paragraph of the article, it was coded "other." During the coding sessions, questions of ambiguities and uncertainties were discussed and a consensus was established.

The Interviews

Although coding the newspaper articles and calibrating their direction may explain how the newspapers reported the B-2's story, another area was explored for this research. Shaw and McCombs described the press' agenda setting as, "the end result of a process of institutional and personal decisions whether we are talking about political issues or issues unrelated to any political campaign."²⁶ The political issue at stake here pertains to the future of the B-2 bomber. How

the media portrayed the bomber is crucial; but how the press' agenda was set is also vital to this study. To understand how the press set the agenda and how one institution influences another, personal interviews were conducted to answer the following research question:

RQ 3: How did military and political leaders perceive the coverage of the B-2?

Ten personal interviews and five telephone interviews were undertaken to compile information about the B-2 and decisions made about it. The personal interviewees were Colorado's U. S. Representative Patricia Schroeder; General Robert Herres, former vice chairman of the Joint Chiefs of Staff; General Larry Welch, Air Force chief of staff; Pete Williams, assistant secretary of defense for public affairs; General John Chain, commander-in-chief of Strategic Air Command; Brigadier General William Devitt, Strategic Modernization spokesman for the B-2 program; Tony Cantafio, director of public affairs for Northrop Corp.; Colonel Richard Crouch, test pilot for B-2's maiden flight; Lieutenant Colonel Jan Dalby, director of public affairs at Edwards Air Force Base, Calif.; and Lieutenant Colonel Pat Mullaney, public affairs officer for B-2 program. The following people were interviewed via telephone: Brigadier General Michael McRaney, former Air Force

director of public affairs; Captain Tess Taft, former Air Force public affairs officer in charge of the B-2 roll-out plan; Bill Sweetman, author of Stealth Bomber and expert on aviation; Andrew Rosenthal, reporter for the New York Times; and Rick Atkinson, reporter for the Washington Post.

Personal interviews ranged from 15 minutes to one and one-half hours. Although each interviewee--with the exception of the reporters--had the same general questions posed to him or her, time constraints and the interviewee's personal responses were the key variables for the interviews. A list of proposed questions that guided the interviews is in Appendix C. Each interview was established using what Wimmer and Dominick call "an unstructured interview [with] broad questions" ²⁷ that allowed for a free-flow of information. Most of the interviews were tape-recorded and later transcribed, however, during the interviews with Rosenthal, Taft, Sweetman and Atkinson, hand-written notes were made because a tape recorder was not available. Cantafio's interview was neither taped nor were notes taken, at his request. He agreed to a meeting that was strictly "off-the-record" and for background purposes only. Interviews with Dalby and Mullaney were jointly conducted with Crouch and Devitt, respectively.

Letters requesting interviews were sent to U. S. Representative Les Aspin, chairman of the House Armed Services Committee, and U. S. Senator Sam Nunn, chairman of the Senate Armed Services Committee. Aspin declined the interview in a personal letter, but Nunn never responded to the letter or numerous telephone calls. An interview was requested with Dick Cheney, Secretary of Defense, but was declined by his scheduling assistant.

The Analysis

Two forms of analysis, statistical analysis or the chi-square, and descriptive analysis or crosstabs, were applied to this study. By using a spreadsheet computer program, the data from the coding sheets were entered into the computer and analyzed by a statical analysis program called "StatView." The results were then interpreted by the computer in the form of the chi-square and crosstabs. According to Wimmer and Dominick, the chi-square "is simply a value showing the relationship between expected and observed frequencies" and the crosstabs test is merely an extension of the chi-square to test more variables.²⁸ These tests were mathematical tests to determine if there was a significant difference between the expected and observed frequencies and the analytical results of the study.

NOTES--CHAPTER # III

¹ Neal E. Miller, The Scientist's Responsibility for Public Information, (New York: SIPI, 1985) 1.

² John Paul Kowal, "Responsible Science Reporting In a Technical Age," Journal of Technical Writing and Communication, 10 (1980): 307-314.

³ Bernard C. Cohen, The Press and Foreign Policy, (Princeton: Princeton U. Press, 1963).

⁴ James W. Carey, Communication as Culture: Essays on Media and Society, (Boston: Unwin Hyman, 1989) 32.

⁵ Denis McQuail, Mass Communication Theory: An Introduction, 2nd ed. (London: Sage, 1987).

⁶ Donald L. Shaw and Maxwell E. McCombs, The Emergence of American Political Issues: The Agenda-Setting Function of the Press, (St. Paul: West, 1977) 19-20.

⁷ Klaus Krippendorff, Content Analysis: An Introduction to Its Methodology, (Beverly Hills: Sage, 1980) 40.

⁸ Ibid. Shaw and McCombs. 5.

⁹ Tsan-Kuo Chang, "How Three Elite Papers Covered Reagan China Policy," Journalism Quarterly, 61 (1984): 429-432.

¹⁰ Ibid. McQuail. 167.

¹¹ Ibid. 282.

¹² Lewis Donohew, "Newspaper Gatekeepers and Forces in the News Channel," Public Opinion Quarterly, 31 (1967): 61-65.

¹³ Lee Wilkins, Shared Vulnerability: The Media and American Perceptions of the Bhopal Disaster, (Westport, Conn: Greenwood Press, 1987) 111.

¹⁴ Ibid. Carey. 8-9.

15 Henry B. Woolf, ed. Webster's New Collegiate Dictionary, (Springfield: Merriam, 1973).

16 Ibid. Krippendorff. 21.

17 Rodger D. Wimmer and Joseph R. Dominick, Mass Media Research: An Introduction, (Belmont, CA: Wadsworth Pub., 1987) 166.

18 Ibid. Donohew.

19 Ibid. Krippendorff. 40.

20 James D. Holloran, Philip Elliott, and Graham Murdock, Demonstrations and Communication: A Case Study, (Middlesex, England: Penguin, 1970).

21 Ibid. Cohen. 59.

22 Deborah A. Barranco and Leonard Shyles, "Arab vs. Israeli News Coverage in the New York Times, 1976 and 1984," Journalism Quarterly, 65 (1988): 179-181.

23 Ibid. Wilkins.

24 Sharon F. Friedman, Carole M. Gorney and Brenda P. Egolf, "Reporting on Radiation: A Content Analysis of Chernobyl Coverage," Journal of Communication, Summer (1987): 58-79.

25 Ibid. Shaw and McCombs. 22.

26 Ibid. Shaw and McCombs. 20.

27 Ibid. Wimmer and Dominick. 127.

28 Ibid. 262.

CHAPTER IV

RESULTS

Introduction

Communication theorists such as James Carey and Denis McQuail have explained how important the media are within a culture. McQuail designates the media as a subsystem of society that influences the way people make decisions, which use information as a means of control.¹ Also, Carey explains how the transmission of information exerts control over the areas it reaches.² Whether the media influence the public by a transmission of ideas or by providing the information to make decisions, the media may set the agenda for society. Many communication scholars have agreed that in the scientific and political arena, most people gain their understanding of these issues from the media. Therefore, how the media treat these issues is likely to be reflected by the images created in the minds of their audiences and by the audiences' agendas.

To understand this process between the media and their audience, this study focused on one subject and its coverage by the New York Times, the Los Angeles Times, and the Washington Post (see Table 4.1). Using three of

Table 4.1

Total Newspapers Analyzed

Newspaper	Number of Articles	Percent
New York Times	103	28.219
Washington Post	100	27.397
Los Angeles Times	162	44.384
Total	365	

the nation's most prominent newspapers with a combined daily circulation of nearly three million, this study examined the agendas of these newspapers and their coverage of the B-2 bomber. In addition, interviews with military and political leaders were conducted to acquire a broader perspective of how the media covered the B-2. A combination of the results of the interviews and the newspapers' content analyses is reported in this chapter.

Military leaders recognize the media as a powerful source of information on which the American public bases its decisions. For example, according to General Robert Herres, former vice chairman of the Joint Chiefs of Staff, "the public doesn't know anything about the B-2 other than what they see in the media."³ His assumption was echoed by several other military leaders who

overwhelmingly pointed to Congress for creating a controversy over the B-2 in the media.

In analyzing the B-2 coverage, the content analysis showed that from the 365 articles that were coded, there were 297 themes with congressional attributions (see Table 4.3). This was 18.4 percent of the total number of themes that were coded. Furthermore, 246 or 83 percent was negative, which indicated that not only did the media report what Congressional members said about the B-2, but also that most of reports were unfavorable toward the aircraft. In addition a comparison of negative and positive paragraphs was made (see Table 4.2). Of the 49 paragraphs coded from the New

Table 4.2

Congressional Attributions by Newspaper

Newspaper	Negative Para.	Positive Para.	Total*
NY Times	77.55%	22.44%	30.25%
Wash Post	71.11%	28.88%	27.77%
LA Times	80.88%	19.12%	41.97%
Total	77.16%	22.84%	100%

* Denotes percentage of paragraphs coded.

Table 4.3

Themes Analyzed

Theme	Negative	Positive	Total	-/+ Ratio
Communist decline in E. Europe	17	7	24	2.43
Mission of B-2	41	26	67	1.58
Congressional attribution	246	51	297	4.82
Price of B-2	339	65	404	5.22
Northrop's litigation	42	15	57	2.80
Eliminate/reduce no. of B-2	60	56	116	1.07
Transfer of technology	0	4	4	0.00
B-2 as economic factor	10	50	60	0.20
Soviet military threat changes	39	22	61	1.77
Experts' attributions	72	158	230	0.46
External influence on B-2	18	7	25	2.57
Military spending necessary	34	20	54	1.70
Miscellaneous	150	67	217	2.24
Totals	1068	548	1616	1.95

York Times, 38, or 78 percent, was negative and only 11, or 22 percent was positive. In the Washington Post, 32 paragraphs, or 71 percent of the 45 coded paragraphs, were negative with 13, or 29 percent positive. The Los Angeles Times, which had the highest percentage of negative paragraphs, had 55 negative paragraphs, or 81 percent, and 13, or a mere 19 percent, positive paragraphs.

Pete Williams, the assistant secretary of defense for public affairs, attributed negative B-2 reporting to "skepticism in Congress, rather than critics in the news media."⁴ Two members of the House Armed Services Committee confirmed this skepticism by their comments about the B-2. Representative Les Aspin, in a personal letter wrote that the B-2 has been "soaring unconfidently at the top of next session's agenda."⁵ In December 1989, Congresswoman Patricia Schroeder predicted that the B-2 was "as good as gone by the end of next year."⁶

B-2's Cost

A major issue stressed by the Air Force generals pertained to the controversy over the amount of money spent on the B-2. While the generals asserted that Congress not only had known about the B-2's "black" or secret budget but also had allocated every penny of it. General Larry Welch, Air Force chief of staff, recounted

his personal knowledge of informing Congress about the B-2. During one of his congressional committee testimonies, he heard Senator John Warner chide his colleagues for non-support of the bomber. The senator reminded the senate committee that for 11 years they had tracked and approved the stealth bomber program. When the heat from their constituents became too intense, they "rolled under the table."⁷ On the other hand, Schroeder denied that Congress knew about the program before it became "white" or public. She accused the Air Force of spending \$23 billion before anyone knew about it.⁸ Both Andrew Rosenthal,⁹ from the New York Times, and Rick Atkinson,¹⁰ from the Washington Post, stated that congressional committees knew about the B-2 program and the costs for years.

However, it was not just for reporting the cost of the program that the military leaders criticized the media; it was the way the figures were presented. According to Welch, the term "sticker shock" was a result of the media's packaging the cost. The media summed up all the costs for research and development; costs for buying the plant in Palmdale, Calif.; production costs; cost for basing the weapon; and future costs of deploying the B-2. Then they divided that number by the total number of aircraft to be purchased and arrived at a cost

per plane.¹¹ Accounting costs like this had not been available in previous years for other weapon systems because factors like research and development had not been incorporated in the fly-away cost. This cost was reported to be between \$500 million to \$600 million per copy. Brigadier General William Devitt, the Strategic Modernization spokesperson for the B-2 program, charged the media with not being in possession of the facts and writing stories about cost that they did not understand.¹² Rosenthal explained the reason for emphasizing the B-2's budget as "you can't talk about the threat and the mission, but you can talk about the budget; it sells newspapers."¹³

The cost of the B-2 was the most dominant of all themes coded in the content analysis. From the 365 articles used in the study, there were 404 price themes with 84 percent of them negative (see Table 4.3). In this category, if the price of the bomber was sensationalized or stated without supporting explanations, it was considered negative. If the cost of the B-2 was explained either in the text or in a quotation, it was considered positive. In most cases, the cost was a billion-dollar amount linked to the airplane without an accompanying explanation.

From the Experts

The third most frequently coded theme was that of expert attributions, which included military and scientific authorities' quotations. In this category, the negative to positive ratio was .46, the lowest of all with 158 positives and 72 negatives (see Table 4.3). This category and the economic factor category are the only two where the positives were higher than the negatives. Since Air Force and Northrop spokespersons were quoted often about the aircraft's technology, capabilities and economic benefits, this would account for many positive codings in these two categories. There were no significant differences among the three newspapers and the number of paragraphs coded positive for the economic factor category (see Table 4.4).

Table 4.4

Economic Factor by Newspaper

Newspaper	Positive Para.	Negative Para.	Total
NY Times	68.75%	31.25%	34.04%*
Wash Post	76.47%	23.53%	36.17%
LA Times	92.86%	7.14%	29.79%
Totals	37	10	47

* Represents percentage of number of paragraphs coded.

However, 92 percent of the Los Angeles Times' paragraphs were positive and the New York Times and the Washington Post had 69 and 76 percent positive, respectively.

The Sample:

It is important to remember that not all articles were coded, only those that fit into the classification of "hard news," which eliminated all opinion-type columns or stories. The resulting sample contained 365 articles spread over a 13.5-month period. In July 1989, 76 stories, or 21 percent of all the articles coded, were published (see Table 4.6). The next highest month was August with 48 articles, or 13 percent of the total. There are four factors, which obviously contributed to the increase in articles for these two months (see Table 4.5). First, on July 10 the bomber rolled down the

Table 4.5

Timetable of Significant Events

Date	Event
Jul 10, 1989	First taxi test of B-2
Jul 17, 1989	First flight of B-2
Jul 24, 1989	Congress begins B-2 funding debates
Aug 16, 1989	Second flight of B-2

Table 4.6

Articles by Month

Month	No. of Articles	Percent
Nov 88	15	4.11
Dec 88	21	5.75
Jan 89	13	3.56
Feb 89	13	3.56
Mar 89	13	3.56
Apr 89	25	6.85
May 89	22	6.03
Jun 89	28	7.67
Jul 89	76	20.82
Aug 89	48	13.15
Sep 89	28	7.67
Oct 89	18	4.93
Nov 89	28	7.67
Dec 89	17	4.66
Total	365	100.00

runway for its first taxi test. Second, after a few false starts the B-2 flew for the first time on July 17. Third, the second flight on August 17 and the third flight on August 26 encountered mechanical delays. Each

time the bomber was scheduled to fly and did not, generated additional stories. Fourth, congressional committees, such as the Appropriations and Authorizations Committees began debating the defense budget on July 24. The B-2 was considered by Congress as a "hot potato," during these debates, according to Welch.¹⁴ Each of these events was covered by the three newspapers in varying degrees of details.

Although most of the articles during July and August were concerned with flight testing and Congressional debates, George Wilson wrote an article for the Washington Post about the B-2's range. According to Devitt, the article had incorrect information, which claimed that the B-1 bomber, a cheaper and older airplane, could fly farther than the B-2. Because of the timing of the publication, the Air Force declassified the B-2's range to correct Wilson's information. By providing the information to the media, the Air Force tried to insure that Congress and the public would have all the facts on which to make decisions.¹⁵

The Direction

There were no significant differences among the three newspapers in the direction of the articles. The New York Times had 52 percent unfavorable, the Washington Post had 58 percent unfavorable, and the Los Angeles

Times had 55 percent unfavorable, which resulted in 55 percent of all articles being coded "unfavorable" (see Table 4.7). Of the 201 unfavorable articles 28 percent

Table 4.7

Newspapers by Direction

Newspapers	Unfavorable	Favorable	Neutral	Total
NY Times	52.43%	26.21%	21.36%	28.22%
Wash Post	58.00%	26.00%	16.00%	27.40%
LA Times	54.94%	26.54%	18.52%	44.38%
Total	201	83	81	365

appeared on the front page of the newspaper and 51 percent were in the first section of the newspaper. The Washington Post had 68 percent of its B-2 stories in the paper's first section and 25 percent on page one, or 93 percent of all articles in section one. In comparison, the New York Times had 65 percent in section one and the Los Angeles Times had 67 percent in the first section (see Table 4.8). In addition, in 84 percent of the articles with the B-2 as the dominant theme, the article ran in the first section with 31 percent of them on the front page (see Table 4.9). This is meaningful in analyzing the agenda set by the media coverage because of

Table 4.8

Newspapers by Location

Newspapers	Front Pg	Front In	Other Pg 1	Other In
NY Times	19.42%	45.63%	11.65%	23.30%
Wash Post	25.00%	68.00%	5.00%	2.00%
LA Times	27.78%	38.89%	16.67%	16.67%
Total	90	178	44	53

the prominence of the newspapers' front page and the first page of other sections of the newspapers.

Table 4.9

Salience by Location

Salience	Front Pg	Front In	Other Pg 1	Other In
Dominant	30.53%	52.63%	7.37%	9.47%
Secondary	19.35%	52.69%	15.05%	12.90%
Other	24.29%	44.63%	12.99%	18.08%
Total	90	178	44	53

In Richard Budd's research for measuring importance in newspapers, he found that stories appearing on the front page or the first page of a section of a

newspaper were considered important by editors.¹⁶ Donald Shaw and Maxwell McCombs also claim that journalists and the public assume articles on the front page of a newspaper are the most important stories.¹⁷ Since 28 percent of the unfavorable articles--or 15 percent of all articles--appeared on the front page of the newspapers, it follows that these articles were considered the most important by the editors and the readers. Also, 10 percent of the unfavorable articles appeared on the first page of another section of the newspapers. It might be noted that 79 percent of unfavorable articles--or 44 percent of all articles--were published in the first section of the newspapers (see Table 4.10). Thus, one

Table 4.10

Direction by Location

Direction	Front Pg	Front In	Other Pg 1	Other In
Unfavorable	27.86%	51.24%	9.95%	10.95%
Favorable	19.28%	43.37%	19.28%	18.07%
Neutral	22.22%	48.15%	9.88%	19.75%
Total	90	178	44	365

may infer that more people read and were influenced by unfavorable articles about the stealth bomber.

Although 49 percent of all stories mentioned the stealth bomber in only one paragraph, 26 percent had the B-2 as the dominant theme, and 25 percent had the bomber as a secondary theme. The majority of the stories, 64 percent, were generated from the national desk and 22 percent appeared in the business or financial section. The remaining 14 percent was divided between the metro and foreign desks (see Table 4.11).

Table 4.11

Newspaper by Section

Newspaper	National	Metro	Business	Foreign
NY Times	67.96%	.97%	23.30%	7.77%
Wash Post	93.00%	1.00%	6.00%	0.00%
LA Times	43.83%	18.52%	30.25%	7.41%
Total	234	32	79	20

Observation of Results

Some observations have been made from these results, but a few more are in order. First, although the coding for each article may have been subjective in

some categories, the inter-coder reliability test established that most categories were objective and provided a significant indication of the articles' directions. To insure adequate measurements, the categories were devised after perusing many articles published in periodicals and newspapers. The interviews also played a formidable part in devising the categories because they reflected the concerns of the military leaders. Therefore, the content analysis was designed either to confirm or refute the interviews. For congressional attributions and the controversy about the B-2's cost, the quantitative study coincided with the qualitative research. In the categories about the decline of communism in Eastern Europe, the transfer of technology to the aircraft industry, and the external influence on the B-2, there was insufficient data to make a significant comparison (see Table 4.3). The data show that the media paid attention to the B-2 while the public's awareness was increasing.

At the beginning of 1988 the B-2 bomber was probably not a term easily defined by the average person. In fact, Williams said, "If you just asked what is 'B-2', the average person probably would say it's a vitamin."¹⁸ However, by the end of 1988 when the Roper Center polled 1,000 registered voters, the results showed that 68

percent of the people questioned had a definite opinion about the B-2.¹⁹ It also might be noted that by the end of 1989, the B-2 stealth bomber had become a ubiquitous issue. Often touted as the "most expensive airplane ever," the B-2 drew controversy in public debates and in the media.

Research Questions

The research questions investigated in this study were: (1) What was the agenda set by the newspapers? (2) What was the newspapers' treatment of the B-2? and (3) How did the political and military leaders perceive the coverage? To answer these questions, it may be observed that the B-2 stealth bomber was indeed on the agenda of the military and Congress from November 20, 1988 to December 31, 1989 with July and August as the peak period. As a result, the B-2 became an important topic for the reporters of the New York Times, the Washington Post and the Los Angeles Times. Rosenthal admitted that B-2 stories were important to his newspaper²⁰ and Atkinson elaborated by saying, "the public has a right to know" about the B-2.²¹ Second, it is consequential that the general treatment of the B-2 bomber by all three newspapers was unfavorable. However, as the content analysis revealed, the unfavorable direction may have been due to the sources of information, which oftentimes,

were members of Congress. Rosenthal attributed this to "the House [being] at odds with the Pentagon, [which] helps [the press] because members of Congress try to get the press on their side."²²

Finally, the military and political leaders perceived the press coverage from their vantage point. Since the press reports were unfavorable about the B-2, the military criticized the media. Herres, Welch, and Devitt referred to many reporters as "talents,"²³ "stars,"²⁴ and "personalities,"²⁵ who provide their opinion to the issue, rather than objectively reporting the story. However, General John Chain, commander-in-chief of Strategic Air Command, stated that the controversial coverage of the B-2 was not started by the media, but "by fuzzy-headed congressmen and senators who had no idea of what the B-2 was or what it was for."²⁶

The political leaders perceived the press reports in a different vein. Their point of view was entrenched in how the media were reporting the issue, because as General Michael McRaney, former Air Force director of public affairs, said, Congress' priority was to get re-elected.²⁷ Schroeder saw the B-2 as problem to be avoided because it was a joke by Johnny Carson; it had technical problems; and it had lost congressional support.²⁸ According to Chain, the B-2 lost

congressional support because of budget cuts. When the President ordered cuts in the defense budget, the Pentagon proposed closing military installations. Base closings were not popular with Congress because they affected jobs in congressional districts. A loss of jobs could be detrimental to a member of Congress' re-election. Therefore, Congress's support wanned.²⁹ As Rosenthal explained above, this pitted Congress against the Pentagon with the B-2 as the birdie they volleyed.

Although Schroeder has predicted that the B-2 will not make it into the Air Force inventory, the military leaders have been confident that at least a portion of the 132 bomber fleet would be authorized to maintain national security and nuclear deterrence. This debate is not yet settled, but 13 B-2s have been authorized by Congress and more may be in the future. In this study the direction of the media's reporting on the B-2 was more unfavorable than neutral or favorable, but the bomber appears to have won a temporary place in the defense budget. However, the pendulum may swing in the other direction and Shroeder's prophecy may come true.

NOTES-CHAPTER # IV

¹ Denis McQuail, Mass Communication Theory: An Introduction, 2nd ed., (London: Sage, 1987) 67.

² James W. Carey, Communication as Culture: Essays on Media and Society, (Boston: Unwin Hyman, Inc., 1989) 52.

³ General Robert Herres. Personal interview. 16 Nov. 1989.

⁴ Pete Williams. Personal interview. 15 Nov. 1989.

⁵ Rep. Les Aspin, letter to the author, 11 Dec. 1989.

⁶ Rep. Patricia Schroeder. Personal interview. 19 Dec. 1989.

⁷ General Larry Welch. Personal interview. 17 Nov. 1989.

⁸ Ibid. Schroeder.

⁹ Andrew Rosenthal. Telephone interview. 15 Nov. 1989.

¹⁰ Rick Atkinson. Telephone interview. 15 Nov. 1989.

¹¹ Ibid. Welch.

¹² Brigadier General John Devitt. Personal interview. 16 Nov. 1989.

¹³ Ibid. Rosenthal.

¹⁴ Ibid. Welch.

¹⁵ Ibid. Devitt.

¹⁶ Richard Budd, "Attention Score: A Device for Measuring News 'Play,'" Journalism Quarterly, 41: (1964) 259-262.

17 Donald L. Shaw and Maxwell E. McCombs, The Emergence of American Political Issues: The Agenda-Setting Function of the Press, (St. Paul: West, 1977) 25.

18 Ibid. Williams.

19 The Roper Center Survey, Market Opinion Research, "Americans Talk Security #12," (Dec. 10-13, 1988).

20 Ibid. Rosenthal.

21 Ibid. Atkinson.

22 Ibid. Rosenthal.

23 Ibid. Herres.

24 Ibid. Welch.

25 Ibid. Devitt.

26 General John Chain. Personal interview. 2 Nov. 1989.

27 Brigadier General Michael McRaney. Telephone interview. 19 Nov. 1989.

28 Ibid. Schroeder.

29 Ibid. Chain.

CHAPTER V

CONCLUSION

An inherent requirement in the study of an issue such as the B-2 bomber, is to consider many aspects of the program and how they are influenced. In today's society the media are but one institution that influences public policy, which dictates the operation of the B-2 program. Therefore, one must understand the background and cultural context of the B-2.

B-2's History:

In the 1970s the concept of a stealth or radar-evading bomber began in the Department of Defense's "black" or secret world. Developing and operating the bomber combined 1950s low-observable, flying wing technology with modern computer engineering to produce the revolutionary aircraft. Computer technology updated the cockpit and the production of the B-2. As a replacement for the aging B-52 long-range manned bomber, the B-2 would modernize America's strategic forces and insure nuclear deterrence into the 21st century. Since developing the B-2 would take years, 100 B-1s were built as interim bombers. Because the B-2 employed such an innovative process, the aircraft was susceptible to

delays and cost increases. However, for the first 15 years, these problems and their solutions were confined to an esoteric group of military, industrial and congressional leaders.

During the 1979 presidential election campaign, the B-1 bomber became such a controversial issue that it became known as the Republican bomber. President Jimmy Carter wanted to cancel production of the B-1, but Presidential candidate Ronald Reagan based his campaign platform on the B-1 to modernize strategic forces. By default, the B-2, which was still a classified program, became the Democrats' airplane.¹ After the election, the Democrats secured the majority of seats in Congress, and the B-2 was no longer a political issue. Yet, when President George Bush and his administration began cutting the defense budget, the B-2 was no longer a sacred cow protected by "black" world funding. Funding for the program was sparred against the B-2's role in national security.

Meanwhile, historic changes began taking place in Eastern Europe and the Soviet Union. Communist leadership was being overthrown in Poland and Czechoslovakia and replaced by a democratic government. In Germany the Berlin Wall crumbled under pressure for a freer society. In Russia, Mikal Gorbachev inaugurated

glasnost and perestroika, which drew Soviet and American leaders to the nuclear arms negotiating tables. These crucial changes questioned the B-2's role in national security. If there were no longer a Soviet nuclear threat, then there would be reasonable doubt as to what the B-2's mission would be in the 21st century.

But the bomber's mission was not its only controversial issue. The total accounting costs of the B-2 have caused it to be designated the most expensive aircraft ever. Even though the dollar amount is the highest of any weapons system, the B-2 program's percentage of the defense budget is about the same as the B-1 or the B-52 when they were produced. Also, the B-2's price tag has been compared to many social programs. For example, in the Mar. 15, 1990, issue of USA Today, the amount of money spent on the B-2 for one day was \$15,167,000, compared to \$718,000 spent on drug and substance abuse research and to \$440,000 paid for rental assistance for the homeless.² On the other hand, the economic impact of the B-2 program on communities like Knob Noster, Mo., indicates how important it is to keep the B-2 in production for some areas. Knob Noster is near Whiteman Air Force Base, which will be the home of the first fleet of B-2s.³ According to a Northrop news

release, contractors sub-contractors, and suppliers in 46 states participate in the production of the B-2.

B-2 and the Media

Thus, the B-2 emerged from its protective black shield as the target for budget cuts and political debates. Would there be a Soviet threat in the 21st century that would require the B-2? Was the amount of money required to continue the B-2 program more than an austere defense budget could stand? These were key issues reported by the media. But the answers to the questions varied according to which experts--be they political, scientific, or military--were cited by the press.

Military leaders like General Robert Herres, former vice chairman of the Joint Chiefs of Staff, charged the media with sensationalizing stories about the B-2 because "the media hold the public interest by writing controversial things."⁵ Herres explained that the American public did not understand the aircraft and its mission because the media failed to report the positive aspects of the B-2. By focusing on the cost or the oil pressure gauge problem, the general said that the media made the airplane sound like a failure. The changes in Eastern Europe were not indicators to him that

there was no need for the B-2, but these shifts strengthened the argument for a manned strategic bomber.

Comparing the cost factor of the B-2 with social programs, according to General Larry Welch, Air Force chief of staff, should be considered only if national priorities had changed.⁶ With formidable social and economic problems and a decrease in world tensions, Welch contends that one might conclude that the military threat had declined. However, he does not believe that this has happened yet and the national security of the country still depends on the B-2 program. Both Welch and General John Chain, the Strategic Air Command's commander-in-chief, agree that Gorbachev's intentions may be to reduce nuclear armament, but as military leaders they cannot base national security plans on intentions.⁷ They must use current Soviet capabilities in their war planning. Since there has not been a significant draw-down of Soviet nuclear weapons, the generals must continue to plan America's future with this in mind.

Although Air Force leaders, like Welch and Herres, have expressed contempt for the media, they recognize the media as a powerful tool for keeping the public informed. The public has a right to know about how their tax dollars are being spent, conceded Welch, but only within the confines of national security. Some programs are

required to be classified, he explained, but they are declassified when feasible.⁸ It costs too much to keep a program in the black. For this reason and because there was no way to test the B-2 in complete secrecy, the aircraft was rolled out before a group of 500 people on Nov. 22, 1988. The military realized that the press would write about the bomber whether the military furnished the information or not. If the Air Force wanted its side of the B-2 program told, the military would have to provide the press with information.

A plan was devised by Lieutenant Colonel Pat Mullaney, an Air Force public affairs officer, and others to facilitate how the military would work with the media to publicize the B-2.⁹ Since the B-2 was a milestone driven program, rather than a calendar driven program, media events coincided with significant events, such as the first flight. Air Force public affairs officers were placed in charge of planning the details of the media events. However, according to Colonel Richard Crouch, the B-2's test pilot, the planning was not realistic in terms of how the mission would be accomplished. For him these problems consisted of last minute media training for the first flight's press conference and the lack of understanding by public affairs officer and media of potential catastrophes with Cable News Network parked at

the end of the runway. In his opinion, this was an untested, untried aircraft in which many things could have gone wrong.¹⁰ After a few delays for safety's sake, the airplane flew above a cheering crowd of media and interested supporters.

In hindsight, many public affairs officers including Brigadier General Michael McRaney, former director of Air Force public affairs, have recognized how some things could have been planned better. McRaney maintained that the media wanted more information about the B-2 because every time information or a photograph was released, the media used it.¹¹ Although the Air Force is not in the business of selling its weapon systems to the media, as former Senator William Fulbright alleged in his book The Pentagon Propaganda Machine, providing information to the media is necessary.¹² Most of the time the media coverage that resulted from Air Force press releases and news conferences was positive, according to McRaney.¹³ Therefore, it is obvious that the source of information contributed substantially to the direction of the articles published.

This study was designed to assess the agenda set by the media, the direction of the articles published by three prestigious newspapers, and how political and military leaders perceived the coverage of the B-2.

Since only hard news articles were analyzed, the story direction does not represent editorial policy of the newspapers. However, the distribution of the 365 coded articles provided an adequate representation of the direction. The findings of the content analysis confirmed many allegations expressed by the military leaders. Some reporting was responsible to truth and authenticity, in the eyes of the generals. But the greatest problem they perceived was imbedded in the lack of understanding by some reporters and the ineffectual support by congressional proponents.

Additional interviews with members of Congress would have greatly enhanced this study. In addition, it would have been interesting to have added television news coverage to the content analysis. Both aspects would have provided a more in-depth analysis of media coverage of the B-2. However, it may be inferred that because the military and Congress kept the B-2 on their agenda during 1989, so did the media. Using the New York Times, the Washington Post, and the Los Angeles Times as a yardstick for measuring the American press, from this study one may conclude that for the most part, the media portrayed the B-2 in a negative light. This assumption does not necessarily mean that the media were biased against the

B-2, but merely that certain aspects of their coverage were unfavorable.

The Pentagon's agenda was based on national security, which meant building the B-2 to modernize the nation's strategic bomber force. Congress was also concerned with national security, but budget cuts, especially those affecting their districts, drew their attention to a different focal point. Since the content analysis showed that the articles generally matched Congress' agenda, this may account for the 1.95 ratio of negative to positive articles. Although the coverage was not balanced, there was a substantial number of positive elements, which insured that the public received both sides of the issue. However, how the public derived their judgments about the B-2 is not known. Future studies should look at the public's opinion and if the media lead to a particular assessment.

NOTES--CHAPTER V

¹ Nick Kotz, Wild Blue Yonder: Money, Politics and the B-1 Bomber, (New York: Pantheon Books, 1988) 205.

² "Government Spending on an Average Day," USA Today, 15 Mar. 1990, A1.

³ Bill Nichols, "Knob Noster Has Thrived Off Defense," USA Today, 1 Dec. 1989, A1.

⁴ "The B-2 Nationwide Industrial Team," Northrop Corp., July 1989, 1.

⁵ General Robert Herres. Personal interview. 16 Nov. 1989.

⁶ General Larry Welch. Personal interview. 17 Nov. 1989.

⁷ General John Chain. Personal interview. 2 Nov. 1989.

⁸ Ibid. Welch.

⁹ Lieutenant Colonel Pat Mullaney. Personal interview. 16 Nov. 1989.

¹⁰ Colonel Richard Crouch. Personal interview. 28 Nov. 1989.

¹¹ Brigadier General Michael McRaney. Telephone interview. 19 Nov. 1989.

¹² Senator J. William Fulbright, The Pentagon Propaganda Machine, New York: Liveright, 1970, 41-42.

¹³ Ibid. McRaney.

SELECTED BIBLIOGRAPHY

Books

- Carey, James W., ed. Media, Myths, and Narratives: Television and the Press. Newbury Park, CA: Sage, 1988.
- Carey, James, ed. Communication as Culture: Essays on Media and Society. Boston: Unwin Hyman, 1989.
- Cohen, Bernard C. The Press and Foreign Policy. Princeton: Princeton U. Press, 1963.
- Collins, Richard, James Curran, Nicholas Garnham, Paddy Scannell, Philip Schlesinger, and Colin Sparks, eds. Media Culture & Society: A Critical Reader. London: Sage, 1986.
- Curran, James, Michael Gurevitch, and Janet Woollacott, eds. Mass Communication and Society. Beverly Hills: Sage Pub., 1979.
- Emery, Michael, and Edwin Emery. The Press and America: An Interpretive History of the Mass Media. 6th ed. Englewood Cliffs, NJ: Prentice Hall, 1988.
- Fulbright, Senator J. William. The Pentagon Propaganda Machine. New York: Liveright, 1970.
- Halloran, James D., Philip Elliott, and Graham Murdock. Demonstrations and Communication: A Case Study. Middlesex, England: Penguin, 1970.
- Holsti, Ole R. Content Analysis for the Social Sciences and Humanities. Reading: Addison-Wesley, 1969.
- Kotz, Nick. Wild Blue Yonder: Money, Politics and the B-1 Bomber. New York: Pantheon Books, 1988.
- Krippendorff, Klaus. Content Analysis: An Introduction to Its Methodology. Beverly Hills: Sage, 1980.
- Levi-Strauss, Claude. Structural Anthropology. Trans. Claire Jacobsen and Brooke Grundfest Schoepf. New York: Basic Books, 1963.

- McQuail, Denis. Mass Communication Theory: An Introduction. London: Sage, 1987.
- Miller, Neal E. The Scientist's Responsibility for Public Information. New York: SIPI, 1985.
- Nelkin, Dorothy. Selling Science: How the Press Covers Science and Technology. New York: Freeman, 1987.
- Real, Michael R. Mass-Mediated Culture. Englewood Cliffs, NJ: Prentice-Hall, 1977.
- Shaw, Donald, and Maxwell McCombs. The Emergence of American Political Issues: The Agenda-setting Function of the Press. St. Paul: West, 1977.
- Sweetman, Bill. Stealth Bomber. Osceola, WI: Motorbooks International, 1989.
- Tunstall, Jeremy, and Colin Seymour-Ure, eds. The Political Impact of Mass Media. London: Constable, 1974.
- Walters, Lynne M., Lee Wilkins, and Tim Walters. Bad Tidings: Communication and Catastrophe. Hillside, NJ: Lawrence Erlbaum Assoc., 1989.
- White, Theodore. The Making of the President, 1972. New York: Atheneum Publishers, 1973.
- Wilkins, Lee. Shared Vulnerability: The Media and American Perceptions of the Bhopal Disaster. Westport, CT: Greenwood Press, 1987.
- Wimmer, Rodger D., and Joseph R. Dominick. Mass Media Research: An Introduction. Belmont, CA: Wadsworth, 1987.
- Woolf, Henry B., ed. Webster's New Collegiate Dictionary. Springfield: Merriam, 1973.

Articles

- Barranco, Deborah A., and Leonard Shyles. "Arab vs. Israeli News Coverage in the New York Times, 1976 and 1984." Journalism Quarterly. 65 (1988): 178-181.

- Blankenship, Jane, Serefa Mendez-Mendez, Jong Guen King, and Joseph Giodan. "Initial Construction of Ferraro In Newspaper Editorials." Journalism Quarterly. 63 (1986): 378-382.
- Budd, Richard. "Attention Score: A Device for Measuring News 'Play'." Journalism Quarterly. 41 (1964): 259-262.
- Carey, James W. "Communication and Culture." Communication Research. Apr (1975): 173-191.
- Carey, James W. "The Origins of the Radical Discourse on Cultural Studies in the United States." Journal of Communication. Summer (1983): 311-313.
- Chang, Tsan-Kuo. "How Three Elite Papers Covered Reagan China Policy." Journalism Quarterly. 61 (1984): 429-432.
- Croholm, Margareta, and Rolf Sandell. "Scientific Information: A Review of Research." Journal of Communication. 31 (1981): 185-196.
- Donohew, Lewis. "Newspaper Gatekeepers and Forces in the News Channel." Public Opinion Quarterly. 31 (1) (1967): 61-68.
- Friedman, Sharon M., Carole M. Gorney, and Brenda P. Egolf. "Reporting on Radiation: A Content Analysis of Chernobyl Coverage." Journal of Communication. Summer (1987): 58-79.
- Glynn, Carroll J., and Albert R. Tims. "Sensationalism In Science Issues: A Case Study." Journalism Quarterly. 59 (1982): 126-131.
- "Government Spending on an Average Day." USA Today 15 Mar. 1990: A1.
- Hardt, Hanno. "British Cultural Studies and the Return of the 'Critical' in American Mass Communication Research: Accommodation or Radical Change?" Journal of Communication Inquiry. 10 (1986): 117-124.
- Johnson, Karen. "The Honeymoon Period: Fact or Fiction?" Journalism Quarterly. 62 (1985): 869-876.
- Kowl, John Paul. "Responsible Science Reporting in a Technological Age." Journal of Technical Writing

and Communication. 10 (1980) 307-314.

Krieghbaum, Hillier. "Reporting Science Information Through the Mass Media." Journalism Quarterly. 40 (1963): 291-292.

Malek, Abbas. "New York Times' Editorial Position and the US Foreign Policy: The Case of Iran." Gazette. 42 (1988): 105-119.

Meehan, Eileen R. "Between Political Economy and Cultural Studies: Towards a Refinement of American Critical Communication Research." Journal of Communication Inquiry. 10 (1986): 86-94.

Montgomery, Louise F. "Images of the United States in the Latin American Press." Journalism Quarterly. 65 (1988): 655-660.

Nichols, Bill. "Knob Noster Has Thrived Off Defense." USA Today 1 Dec. 1989: A1.

Picard, Robert G., and Paul D. Adams. "Characterizations of Acts and Perpetrators of Political Violence in Three Elite Newspapers." Political Communication and Persuasion. 4 (1987): 1-9.

Schultz-Brooks, Terri. "American Press Coverage of President Francois Mitterrand." Gazette. 39 (1987): 103-122.

Smith, Ron F., Sherlyn-Ann Tumlin, and Volker Henning. "A Gatekeeping Study of Gannett's All-local Newspaper Experiment." Journalism Quarterly. 65 (1988): 740-744.

Sorauf, Frank J. "Campaign Money and the Press: Three Soundings." Political Science Quarterly. 102 (1) (1987): 25-42.

Tarpley, J. Douglas. "American Newsmagazine Coverage of the Supreme Court." Journalism Quarterly. 61 (1984): 801-804.

Interviews

Atkinson, Rick. Telephone interview. 16 Nov. 1989.

Cantafio, Tony. Personal interview. 29 Nov. 1989.

Chain, General John. Personal interview. 2 Nov. 1989.

Crouch, Colonel Richard. Personal interview. 28 Nov. 1989.

Devitt, Brigadier General William. Personal interview. 14 Nov. 1989.

Herres, General Robert. Personal interview. 16 Nov. 1989.

McRaney, Brigadier General Michael. Telephone interview. 19 Nov. 1989.

Mullaney, Lieutenant Colonel Pat. Personal interview. 12 Oct. 1989, 14 Nov. 1989.

Rosenthal, Andrew. Telephone interview. 16 Nov. 1989.

Schroeder, Representative Patricia. Personal interview. 19 Dec. 1989.

Sweetman, Bill. Telephone interview. 15 Nov. 1989.

Taft, Captain Tess. Telephone interview. 22 Oct. 1989.

Welch, General Larry. Personal interview. 17 Nov. 1989.

Williams, Pete. Personal interview. 14 Nov. 1989.

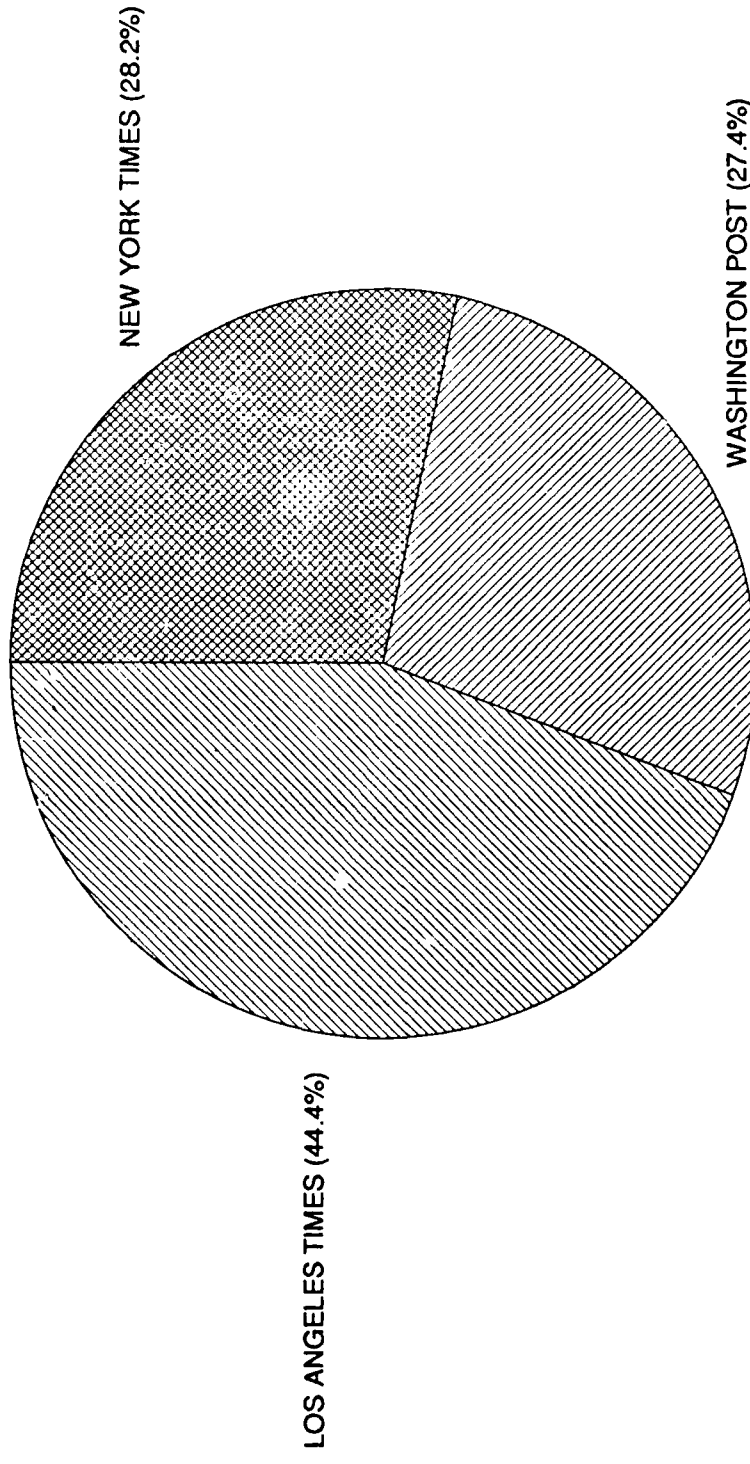
Other Works Cited

Aspin, Representative Les. Letter to the author. 11 Dec. 1989.

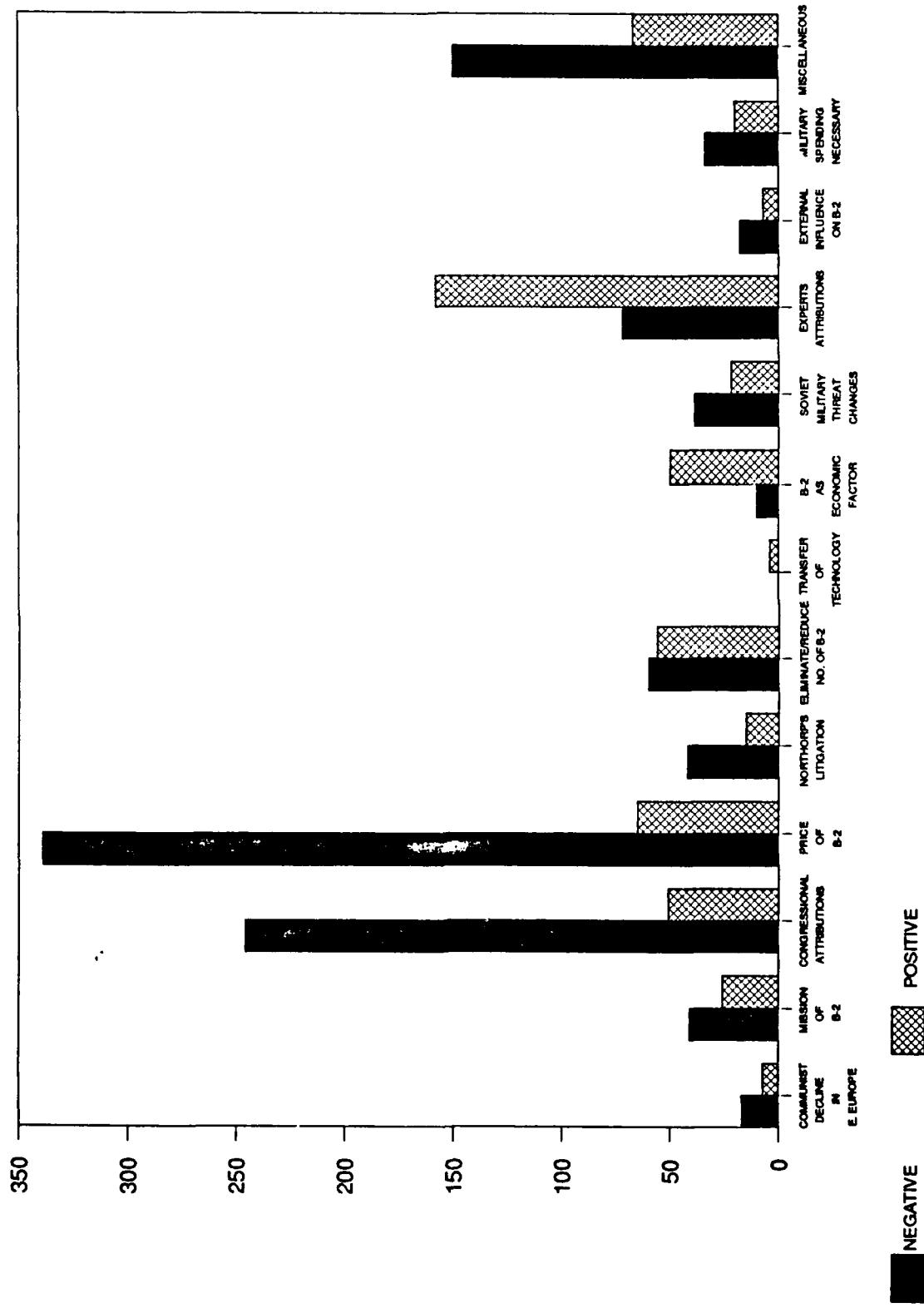
The Roper Center Survey. "Americans Talk Security #12." 10-13 Dec. 1988.

"The B-2 Nationwide Industrial Team." Northrop Corp. July 1989.

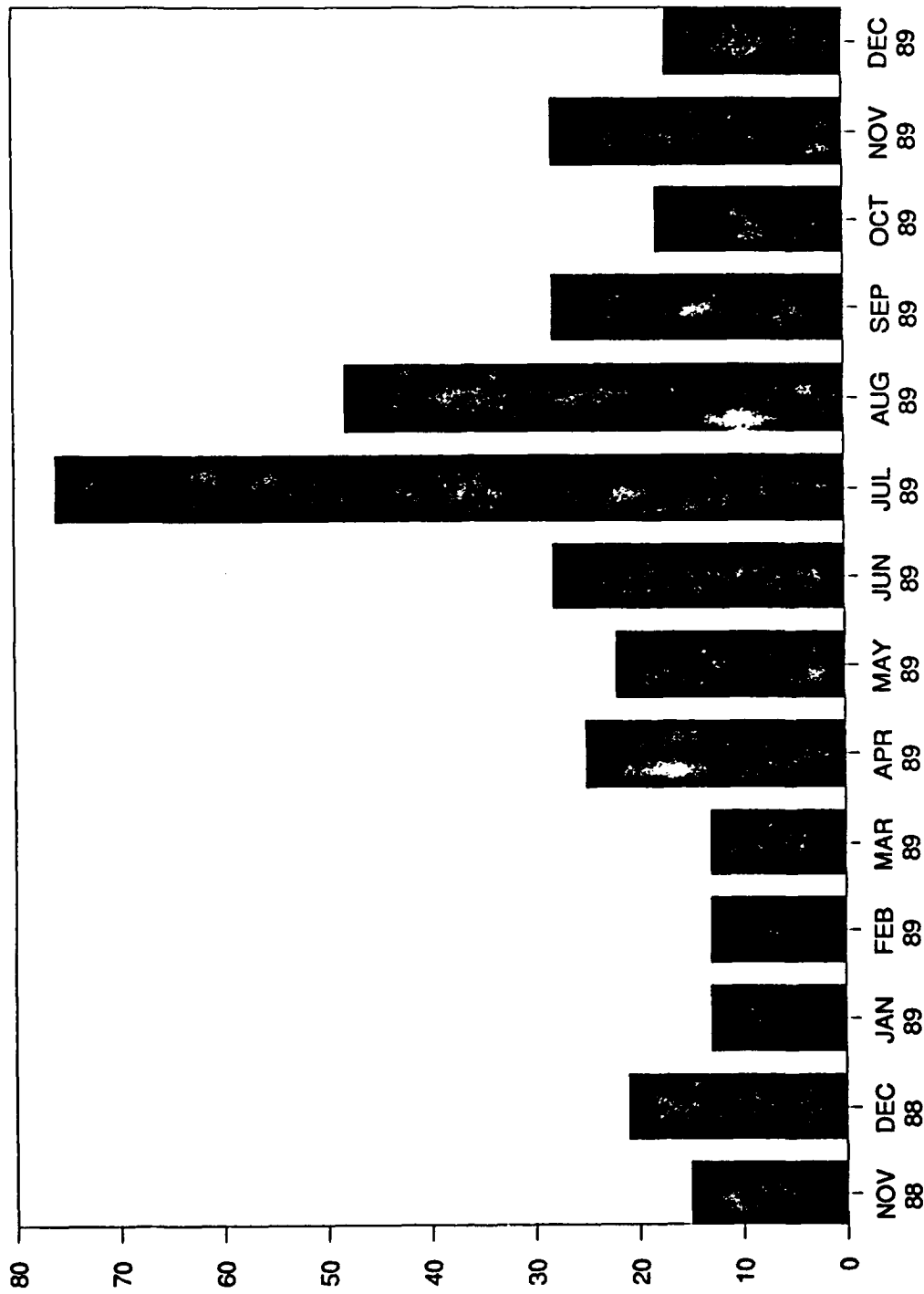
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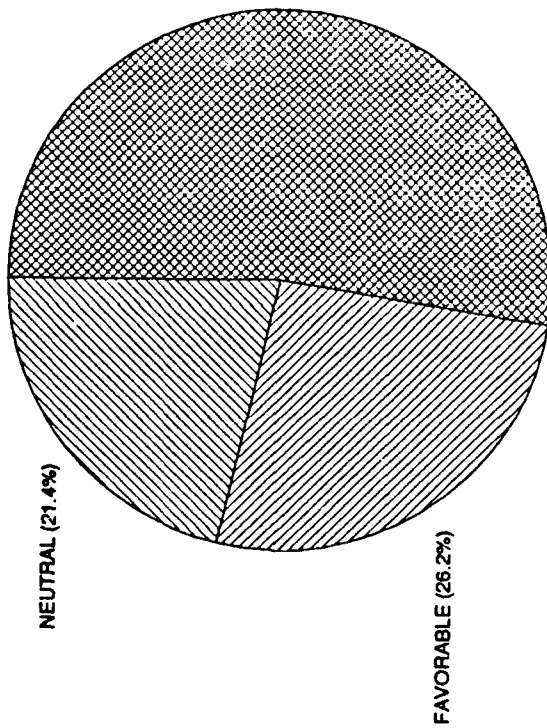


ARTICLES BY MONTH

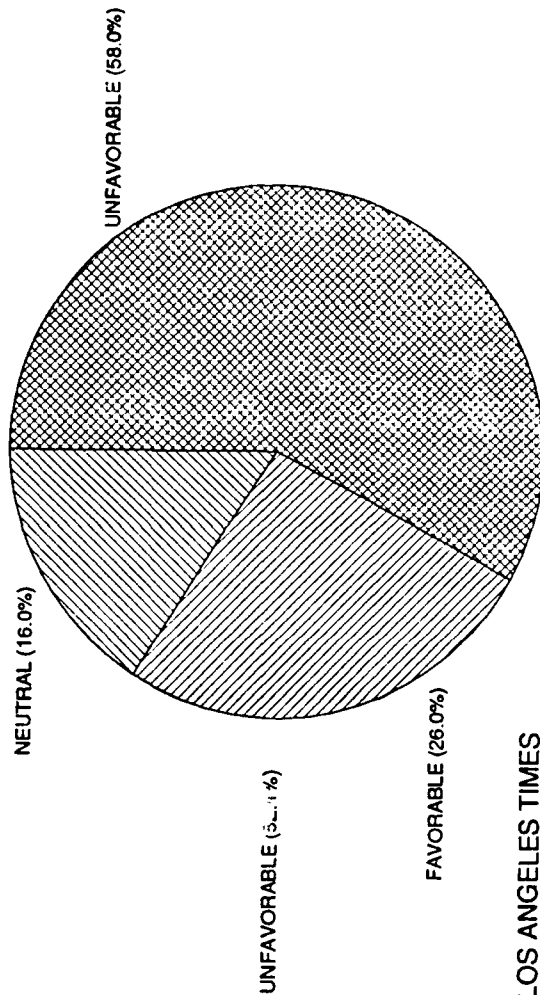


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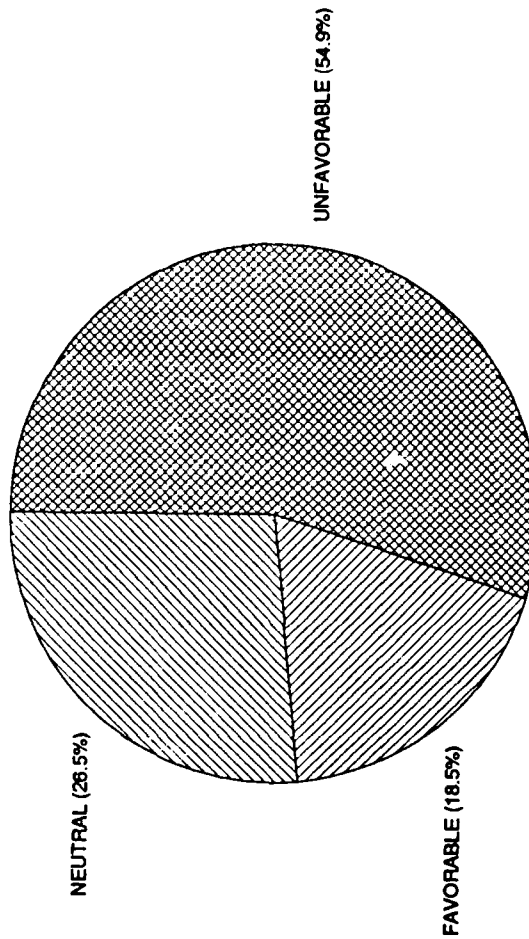
NEW YORK TIMES



WASHINGTON POST

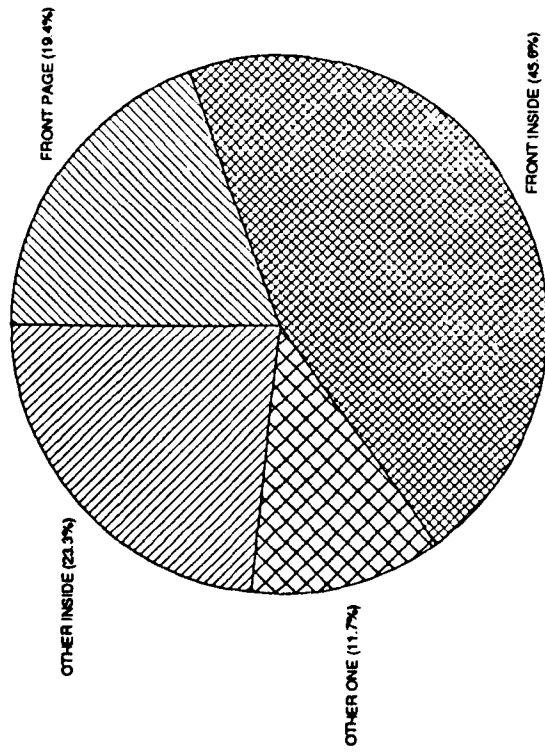


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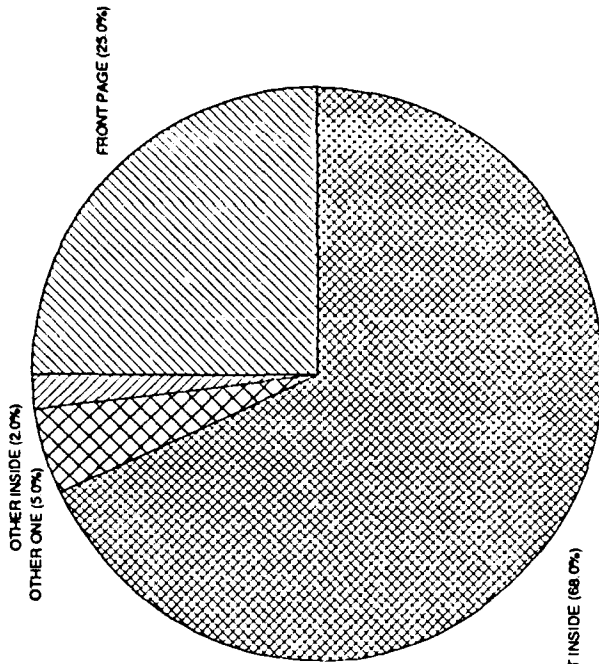


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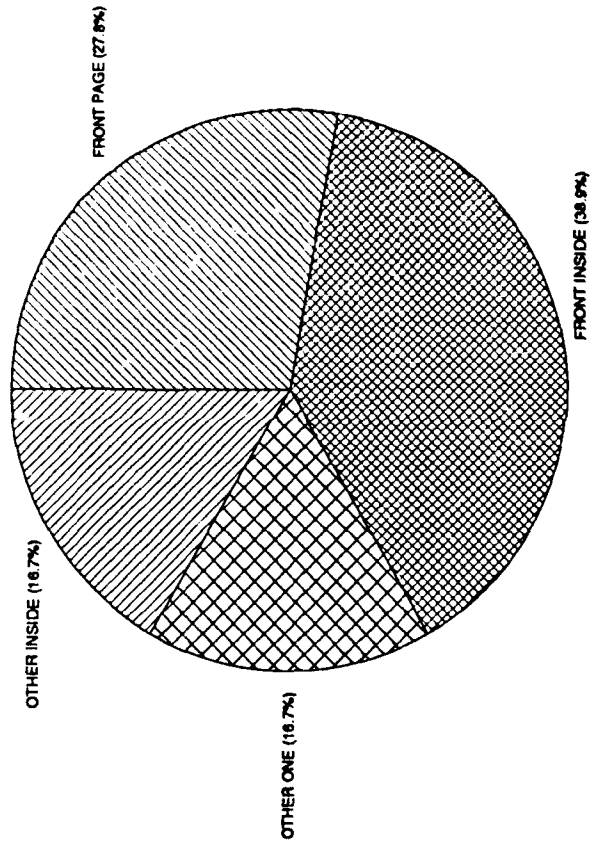
NEW YORK TIMES



WASHINGTON POST



LOS ANGELES TIMES



NEWSPAPER: _____ DATE/DAY: _____

HEADLINE: _____

CODER: _____ DATE CODED: _____

BYLINE: _____ SECTION LOCATION: _____

Negative -		Positive +	
Euphemisms for the B-2	n/a	Euphemisms for the B-2	n/a
Decline of Communism = decline of need for B-2 (Eastern Europe)	17	Decline of Communism, no effect on need of B-2 (Eastern Europe)	7
Mission of B-2, manned bomber ineffective	41	Mission of B-2, manned bomber effective	26
Member(s) of Congress against the B-2	236	Member(s) of Congress for the B-2	51
B-2 price tag stressed	339	B-2 price tag explained	65
B-2 affected by Northrop litigation	42	B-2 unaffected by Northrop litigation	15
Elimination of entire B-2 program proposed	60	Keep B-2 program but reduce number built	56
B-2 technology not transferable to industry	0	B-2 technology transferable to industry	4
B-2 not important to national economy	10	B-2 important to national economy	50
Soviet military threat changes status of B-2	39	Soviet military threat doesn't change B-2's	22
Expert speaks against	72	Expert speaks for B-2	158
External influence -	18	External influence +	7
Military spending unnecessary	34	Military spending necessary	20
Miscellaneous -	150	Miscellaneous +	67

Note: In some articles, it may be possible that the articles contain both negative and positive statements about one item. If so, denote this with a + and -, as this will be used in the analyses.)

- * Note: The following is to be used to list specifics for Euphemisms of the B-2 on Page 1 of Coding Sheet.

Words used to describe the B-2

Nouns		
unfavorable	Neutral	Favorable
warplane	B-2 stealth bomber	flying wing
stealth taxi	aircraft	

*Please list additional words on back.

Adjectives		
Unfavorable	Neutral	Favorable
costly	black	futuristic
most expensive	secret	radar-evading
controversial	new	exotic

SUMMARY			
CONTENT TOTALS: +	548	- 1068	NET 1616
LENGTH IN WORDS	317,663	PAGE NUMBER	N/A
HEADLINE/LEAD PARAGRAPH COMPARISON:		N/A	
STORY CATEGORY: DOMINANT	95	SECONDARY	93
		OTHER	177

PROPOSED QUESTIONS

1. As early as January 1987 proposed funding for the "stealth" bomber was released to the media. However, neither the contract announcement nor any specifics about the B-2 project came out until at least a year later. Therefore, the public and media were privy only to the "sticker price" of a very expensive aircraft and knew very little of its capabilities. In your opinion, what effect on the public did this limited information produce, as interpreted by the media?

2. Some people have suggested that because the B-2's mission, design, and testing have been kept secret, routine operations and malfunctions have been blown out of proportion. For example, the oil pressure gauge problem became headline news for one of the B-2's test flights. In retrospect, did the lack of information create this type of sensationalism and could it have been avoided? If so, how?

3. I understand that after the B-2 prototype had been built and officials realized that clandestine flight-testing would be impossible. In making the declassification decisions, was the role that the media might play considered? Did the media fulfill this role or did they create new aspects that had not been anticipated?

5. Although members of Congress, especially those on the Armed Services Committees, were invited to tour Northrop facilities and were offered briefings on the B-2, most of the debates on the Senate and House floors have reflected a lack of understanding of about the B-2 and why it is needed. In fact, some members of Congress have chided their colleagues for truancy in taking advantage of opportunities to become more knowledgeable about the B-2. What is your perception and opinion of this assumption?

6. For the last three decades the Russians' Communist doctrine has been considered the main reason for our maintaining a strong military. Under the leadership of Mikhail Gorbachev the Soviet Union appears to some as changing its philosophy to a new openness and becoming more closely aligned with Western ideology. If this is true, it is expected that the military threat would diminish. If so, how can one expect the average American to comprehend the necessity of the B-2 in the age of glasnost and perestroika?

7. Since one of the justifications for the B-2 is its ability to penetrate Soviet airspace without detection or refueling, what in your opinion would be the major military threat our country would face?

8. Do you see any major changes or differences in the support of the military's modernization programs, specifically the B-2, under the new administration? If so, to what factors do you attribute the change?

9. On a MacNeil-Lehrer Newshour a few months ago Secretary of Defense Cheney said that he had asked Congress to either fund the B-2 program completely or not at all. In his words he asked that Congress, "not nickle and dime it to death." Even though in September the Senate rejected a bill that would have cut B-2 appropriations, delays in production have forced the cost to exceed its predicted amounts. As the setbacks occur, projected costs use a "then-year" formula instead of current dollar amounts. Is the delay driving the cost up unnecessarily? Because of this, do you think the program will be "nickeled and dimed to death?" Finally, how can the Air Force and its contractors prevent current money from becoming "then-year" dollars?

10. Designing and building a highly classified weapon system like the B-2 in a democratic society requires a balance in deciding what must be revealed to obtain support--from the public, Congress and the media. How does the military go about striking that balance? Do you think we have been successful in maintaining their balance; if so, in what perspective?

11. In the early 1970's Senator William Fulbright wrote a book entitled The Pentagon Propaganda Machine which lambasted the Department of Defense and its ideologies as well as its Public Affairs staffs for promoting both. He went so far as to say, "The greatest threat to American national security is the American Military Establishment and the no-holds-barred type of logic it uses to justify its zillion dollar existence." One of the biggest criticisms of the B-2 program has been its billion dollar price tag. First, how do you view the Air Force's need to modernize its bomber force with the B-2? Second, how do you perceive Senator Fulbright's assumption that the military poses a threat to national security by promoting the such modernization of weapons systems like the B-2?

12. In the 1940s and 1950s the mood of the American people was pro-military with dozens of films about war heroes and the American military might. One of the most memorable was "The Strategic Air Command" which portrayed the professionalism of our bomber force. Do you think films like this would sway the public today or did they even influence the average American's way of thinking?

13. Under the leadership of Gen. Curtis LeMay, SAC's bomber force was modernized with the B-52 which made its first flight on April 15, 1952. That historic flight at Dayton, Ohio, and future testings were open to the public, unlike the B-2's test flights. How would you compare the publicity and media coverage of these two bombers?

14. In a recent poll from the Roper Center, only 25 percent of 1,000 nationally registered voters, who were surveyed, thought the B-2 was necessary. Do you think this is a fair assumption of Americans attitude? If so, do think it is adequate to provide the public support required in a democracy?

15. What do you think would be the best approach to keep the American public informed about classified programs like the B-2?

LIST OF ARTICLES CODED

Washington Post

	DATE	LENGTH	PAGE	BYLINE
1	Dec. 13, 89/W	938	A-1	Patrick Tyler Nunn Calls Defense Plan Flawed; Administration Is Said To Ignore Decline In Soviet Threat
2	Dec. 8, 89/F	717	A-1	Molly Moore Pentagon Loses '91 Budget Fight; 2% Cut Planned
3	Nov. 26, 89/Su	2159	A-1/1	George Wilson U. S. Begins Revamping the Military; \$300 Billion Budget Now Hard to Justify
4	Nov. 21, 89/Tu	1044	C-1	Sandra Sugawara Defense Stocks Take Beating From Cutback Order
5	Nov. 20, 89/M	499	A-5	Kathy Sawyer Cheney Says Air Force Cuts Remain to Be Decided; Service Has Proposed Closing 15 Bases, Slowing B-2 Bomber Purchases, Cutting Fighters
6	Nov. 18, 89/Sa	1097	A-1	Molly Moore Administration Seeks Defense Spending Cut; Cheney Says Soviet Threat Has Diminished
7	Nov. 5, 89/Su	720	A-11	Staff Writer Official Describes Plan for Manned Mini-Shuttle
8	Nov. 5, 89/Su	731	A-12	George Wilson Soviet Proposes Joint Mission to Inspect Satellites;
9	Nov. 3, 89/F	715	A-16	Helen Dewar Panel Votes \$305 Billion Defense Bill; SDI Funding Cut; Two B-2s Approved
10	Nov. 3, 89/F	1181	A-18	James Rowe, Jr Sequestration Axe Is Already Beginning to Fall on Personnel and Services
11	Nov. 2, 89/F	325	A-20	Helen Dewar Congress Nears First Cut in SDI Funding
12	Oct. 21, 89/Sa	668	A-8	George Wilson Hill Lobbying Mires Pentagon Budget; Cheney Begins Trip Abroad With Controversial Decisions in Air

- 13 Oct. 10, 89/Tu 382 A-15 Rick Atkinson
Other Costs Are Involved In \$530 Million Bomber
- 14 Oct. 10, 89/Tu 3332 A-1 Rick Atkinson
How Stealth's Consensus Crumbled; As Costs Became
Clearer, Political Climate and Priorities Changed
- 15 Oct. 9, 89/M 3731 A-1 Rick Atkinson
Project Senior CJ; The Story Behind the B-2 Bomber
- 16 Oct. 8, 89/Su 5091 A-1 Rick Atkinson
Project Senior CJ; The Story Behind the B-2 Bomber
- 17 Oct. 8, 89/Su 1234 D-1 Kamen/Chris Spolar
Thousands March on Mall in Mass Appeal for
Affordable Housing
- 18 Oct. 6, 89/F 666 A-14 George Wilson
B-2 'Stealth' Bomber Has Shorter Cruising Range
Than Older, Cheaper B-1
- 19 Sep. 30, 89/Sa 1189 A-7 George Wilson
Sweeping Restructuring of Military To Be Powell's
Mission as New Chief; Budgetary, International
Pressures Point to Need for Changes
- 20 Sep 27, 89/W 901 A-4/1 Helen Dewar
Senate Rejects SDI Funding Increase; 66-34 Vote
Suggests Sharp Drop in Support for Missile-Defense
Plan
- 21 Sep 27, 89/W 263 A-29 Helen Dewar
Beyond 'Megabucks'; Judging Programs In Terms of
'Stealth'
- 22 Sep 24, 89/Su 1411 A-1 David Hoffman
As World Changes, US Leaders Paralyzed; Nation's
Role Could Shrink As Finances Constrain Choices
- 23 Sep 17, 89/Su 1787 A-22 Tom Kenworthy
Congressional Black Caucus Facing New
Circumstances After 20 Years; Success Produces
Tough Conflicts for 'Conscience of the House'
- 24 Sep 15, 89/F 830 A-6 Dan Morgan
Senators Clash Over SDI Projects, US Troops in
South Korea
- 25 Sep 13, 89/W 680 A-4 Dan Morgan
Promises May Modify Defense Bill; Senate panel's
\$288 Billion Measure Lacks Some Home-State
Projects

- 26 Sep 10, 89/Su 1511 H-1 Evelyn Richards
Aerospace Giants Direct Mid-Level Bailout; Firms
Adopt Creative Ways to Cope With Pentagon Pinch
- 27 Aug 27, 89/Su 1075 A-1 G. Wilson/M. Moore
Hill Moves to Control B-2 Bomber; Flaws in Other
Plane Make Congress Wary
- 28 Aug 24, 89/Th 664 A-11 Molly Moore
Cheney Lambastes House On Defense Budget Cuts;
Politics, Over-Optimism Said to Harm Defense
- 29 Aug 17, 89/Th 628 A-22 George Wilson
Two Pentagon Weapons Experience Setbacks; B-2
Bomber, Trident II Programs Affected
- 30 Aug 13, 89/Su 791 A-20 George Wilson
Cheney Warns Defense Bill Risks a Veto;
Unrequested Arms May Force Troop Cuts
- 31 Aug 10, 89/Th 921 A-1 George Wilson
Gen. Powell Due to Lead Joint Chiefs; Ex-Security
Advisor Would Be 1st Black In Top Military Post
- 32 Aug 5, 89/Sa 409 A-4 Tom Kenworthy
House Votes \$286.4 Billion in Military Funds
- 33 Aug 3, 89/Th 849 A-4 Helen Dewar
Senate Clears \$305 Billion Defense Bill; Bush's
Requests Largely Supported
- 34 Aug 2, 89/W 752 A-7 Helen Dewar
Senate Blocks Anti-Drug Raid on SDI
- 35 Aug 2, 89/W 534 A-8 Dan Morgan
Panel Drops Advanced Fighter, Missile;
Appropriations Also Reduced for New Transport
Airplane
- 36 Aug 1, 89/Tu 506 A-7 Walter Pincus
House Acts to Limit Mass Mailings, Set Pre-
Election Deadlines
- 37 Aug 1, 89/Tu 543 A-7 Helen Dewar
Senate Would Penalize Firm For B-2 Defects;
Warranty Imposed On Northrop Corp.
- 38 Jul 28, 89/F 999 A-1 Tom Kenworthy
House Defense Bill Rejects Bush's Goals; SDI, B-2
Curbed; Midgetman Missile Omitted

- 39 Jul 27, 89/Th 791 A-1 Tom Kenworthy
House Votes to Curb B-2 Purchases; Program in
Danger Unless Costs Drop, Pentagon Is Warned
- 40 Jul 27, 89/Th 1007 A-10 R. Jeffrey Smith
B-2: Strategic Linchpin or Overpriced Experiment?
- 41 Jul 26, 89/W 601 A-1 George Wilson
US Probes possible B-2 Fraud
- 42 Jul 26, 89/W 722 A-14 Helen Dewar
Senate Gives Conditional Go-Ahead on B-2 Bomber;
House Slashes Proposed Spending for SDI
- 43 Jul 25, 89/Tu 853 A-5 H. Dewar/T.Kenworthy
House, Senate Debate Conflicting Defense Bills
- 44 Jul 24, 89/M 728 A-3 Molly Moore
GAO Faults Military on Aircraft Tests, Citing
Deaths From Bird Collisions
- 45 Jul 24, 89/M 362 A-4 Adela Gooch
Cheney Is Hopeful B-2 Will Survive Budget Vote
- 46 Jul 23, 89/Su 913 A-10 Molly Moore
B-2: From Classified Project to TV Star; Secrecy
Wraps Stripped From Bomber to Aid Lobbying for
Funds
- 47 Jul 22, 89/Sa 480 A-5 Ann Devroy
Bush Urges GOP Lawmakers to Protect B-2 Bomber,
SDI in Defense Bill
- 48 Jul 21, 89/F 337 A-19 Jeffrey Smith
Aspin Would Freeze B-2 Funds Until Program Is
Scaled Back
- 49 Jul 21, 89/F 665 G-1 Sandra Sugawara
Defense Firms See Profits Dip, Even Tougher Times
Ahead, Analyst Say
- 50 Jul 20, 89/Th 841 F-1 Paul Farhi
Weapons Firms Carry Out Ad Blitzes, TV, Print
Campaigns Aim To Convince Congress To keep
Programs
- 51 Jul 17, 89/M 923 A-1 David Broder
East Bloc Changes Hailed; But Bush Is Cautious on
Bid by Gorbachev
- 52 Jul 17, 89/M 106 A-4 News Service
Repaired 'Stealth' is Scheduled for Flight Test
Today

- 53 Jul 16, 89/Su 837 A-6 Molly Moore
Fuel-System Problem Delays First B-2 Flight
- 54 Jul 15, 89/Sa 677 A-10 Dan Morgan
Panel Backs Cheney on Navy F-14, B-2; Senators
Delete Money for Fighter, Include Funds for
'Stealth' Jet
- 55 Jul 14, 89/F 689 A-4 Adela Gooch
B-2 Bomber Essential, Cheney Tells House Panel
- 56 Jul 13, 89/Th 641 A-18 Molly Moore
Air Force Counterattacks In Defense of B-2
'Stealth'; Lawmakers Warn of Dramatic Budget Cuts
- 57 Jul 3, 89/M 935 A-9 Molly Moore
Defense Firms Restive at Funding Shift; Some
Costly Weapons Imperiled as Military Spending Is
Rethought
- 58 Jul 1, 89/Sa 764 A-1 Molly Moore
Pentagon Restructure Is Drafted; Cheney Recommends
Broad Streamlining of Arms Procurement
- 59 Jun 29, 89/Th 692 A-16 Molly Moore
Cheney, Aspin Rebuffed on 2 Projects; Panel Votes
to Fund V-22, F-14D Military Aircraft Procurement
- 60 Jun 28, 89/W 535 A-20 Molly Moore
House Panel Cuts \$1.1 Billion From SDI Research;
\$300 Million Taken From AF B-2 and Given to
Marines' V-22 Osprey Aircraft
- 61 Jun 27, 89/Tu 1026 A-7 George Wilson
B-2 Stealth Becomes Hill Target; \$70 Billion
Program Faces Budget Pinch
- 62 Jun 21, 89/W 862 A-1 George Wilson
Arms-Purchase Bill Approved As Submitted; House
Panel Accepts Cheney's Priorities
- 63 Jun 20, 89/Tu 1026 A-14 George Wilson
Pentagon Shifts Policy On Arms Development Costs;
Defense Dept. Will Lift Burden From Contractors in
Quest for Quality, Atwood Says
- 64 Jun 15, 89/Th 622 A-24 George Wilson
Aspin, Contractors Trying to Save Defense Budget;
'Pork-Barrel Deterrence' Aimed at Preventing Major
Revisions to Bush Proposal

- 65 Jun 4, 89/Su 629 A-9 George Wilson
Cheney Champions B-2 Bomber Despite Price Tag;
Cost Soaring Above \$500 Million Apiece Before
Stealth Plane Makes First Flight
- 66 May 23, 89/Tu 361 A-23 Thomas Goltz
Defector's Warplane Returned Without US Tests,
Turks Say; Effectiveness of 'Stealth' Alloy in
Question
- 67 May 19, 89/F 726 A-1 Molly Moore
B-2 Bomber Cancellation Is Urged; Former Officials
Calls Stealth Jet Too Costly; Quality Control Poor
- 68 May 10, 89/W 689 A-6 George Wilson
GAO Sees \$100 Billion Gap in 5-Year Defense Plan
- 69 May 8, 89/M 1159 A-1 George Wilson
Bush ICBM Compromise Threatened; In Rapid Budget
Rewrite, Hill Groups Square Off On Midgetman
- 70 May 1, 89/M 1020 A-1 Molly Moore
More Funds Sought for B-1 and B-2; AF to Request
Billions to Remedy Bombers' Problems
- 71 Apr 26, 89/W 1206 A-1 George Wilson
Cheney Outlines \$10 Billion in 'Painful' Defense
Cuts; Joint Chiefs Endorse Plan-With a Warning
- 72 Apr 26, 89/W 584 A-16 Molly Moore
Contractors Say Employment Would Take Direct Hit;
Defense Industry Layoffs Predicted if Congress
Agrees to Cheney's \$10 Billion in Cuts
- 73 Apr 25, 89/Tu 882 A-4 George Wilson
Defense Budget Cuts Inadequate, Lawmaker Says
- 74 Apr 24, 89/M 358 A-6 Molly Moore
Bush to Seek Cuts in SDI Funding; Program Focus
Will Change, Cheney Says; B-2 Faces 1-Year Delay
- 75 Apr 22, 89/Sa 764 A-1 Jeffrey Smith
Bush Moves to Compromise On US Strategic Missiles;
Mobile MX Midgetman Plan Called Likely
- 76 Apr 21, 89/F 424 F-2 Malcolm Gladwell
Northrop Announces Chairman's Retirement
- 77 Apr 15, 89/Sa 654 A-1 Molly Moore
Pentagon May Lose Weapons; Cheney Proposes Major
Budget Cuts

- 78 Apr 12, 89/W 895 A-1 Ralph Vartabedian
Northrop Charged With Fraud, Conspiracy in Defense
Work
- 79 Apr 10, 89/M 952 A-17 George Wilson
Military Budget to Precede Strategic Review; Cart-
Before-the Horse Procedure Is Expected to Draw
Congressional Fire
- 80 Mar 31, 89/F 283 A-8 LA Times
'Stealth' Firms Plan Layoffs If Congress Withholds
Funds
- 81 Mar 31, 89/F 553 A-10 George Wilson
Flat Budgets Would Weaken Pentagon, CBO Says;
Drastic Reduction in Forces Required if Big Weapon
Programs Are To Be Preserved
- 82 Mar 18, 89/Sa 1179 A-10 Judith Havemann
Federal Vacancies Becoming Drag on Policymaking;
Top-Level Administration Appointees Outnumbered by
Holdovers and Empty Chairs
- 83 Mar 17, 89/F 663 A-4 George Wilson
AF Proposes Cuts in Big Weapon Programs
- 84 Mar 1, 89/W 679 A-11 George Wilson
Tower Involved in Pentagon Planning; Aides Say
Nominee Working on Budget Cuts, Strategic
Assessments
- 85 Feb 15, 89/W 674 A-3 Kathy Sawyer
New US Rocket Lifts Precision Navigation Satellite
Into Orbit
- 86 Feb 15, 89/W 365 A-17 Jeffrey Smith
Bush Will Miss Deadline on Land-Based Missile Pick
- 87 Jan 24, 89/Tu 1157 A-21 Molly Moore
Hard Times Ahead Over Hardware; Pentagon's \$315
Billion Request A Likely Minefield for Bush
- 88 Jan 12, 89/Th 570 A-26 George Wilson
Aspin Urges Pooling Strategic Weapon Funds
- 89 Jan 8, 89/Su 1101 H-5 Evelyn Richards
Ups and Downs of the DRAM Are Microcosm of
Industry Woes
- 90 Dec 28, 88/Th 322 A-6 Molly Moore
Group Urges Cut In 'Stealth' Bomber Production

- 91 Dec 17, 88/Sa 533 A-2 Molly Moore
Stealth Bomber to Cost \$516 Million; Most
Expensive Military Plane Ever; AF Partly Blames
Cost Increase on Redesign
- 92 Dec 14, 88/W 541 A-20 George Wilson
Pentagon Confirms Procurement Plan; Carlucci to
Urge Long-Term Contracts for 32 Weapons Systems
- 93 Dec 13, 88/Tu 920 A-12 George Wilson
Carlucci Budget to Ask Multiyear Arms Contracts;
Secretary's Last Spending Plan Seeks to End Annual
Disputes Over Defense Priorities
- 94 Dec 3, 88/Sa 1132 A-1 Kathy Sawyer
Shuttle Atlantis Lifts Off After Racing the Clock;
High-Altitude Wind Shear Threatened Plans
- 95 Nov 29, 88/Tu 597 A-8 George Wilson
Carlucci Warns on No-Growth Budgets; US Forces
Abroad Would Have to be Cut, Secretary Says
- 96 Nov 29, 88/Tu 796 A-8 Kathy Sawyer
Countdown For Shuttle Is Begun; Reconnaissance
Craft On Thursday Flight
- 97 Nov 28, 88/M 156 A-15 News Service
Frustrated On Weapons
- 98 Nov 26, 88/Sa 636 A-2 George Wilson
Mistake, Icing Suspected in B-1B Bomber Crash;
Plane Flew Too Low in South Dakota Landing Try
- 99 Nov 23, 88/W 1139 A-9 George Wilson
AF Unveils the B-2, Its Radar-Evading Stealth
Bomber
- 100 Nov 20, 88/Su 1418 A-1 George Wilson
Costly B-2 Stealth Bomber To Roll Into Public View

NEW YORK TIMES

- 1 Dec 27, 89/W 1891 D-1 Richard Stevenson
New Jet Fighter: Risks Are High
- 2 Dec 19, 89/Tu 1162 C-1 William Broad
New System Warns of Volcano Dust, but a Plane
Still Flies Into Trouble
- 3 Dec 8, 89/F 476 A-26 Michael Gordon
Head of AF Says Cuts In Spending May Delay B-2

- 4 Dec 7, 89/Th 542 A-22 Michael Gordon
Upheaval In the East; US Offers Moscow a Few Ideas
on How to Improve Its Economy
- 5 Nov 27, 89/M 1291 A-16 Susan Rasky
Lawmakers Say Pentagon Hasn't Thought Through Its
Cuts
- 6 Nov 21, 89/Tu 1145 D-1 Richard Stevenson
Market Place; Behind the Military Stock Sell-off
- 7 Nov 20, 89/M 1102 A-1 Michael Gordon
US Is Considering Sharp Reductions In European
Force
- 8 Nov 19, 89/Su 1032 1-1 Stephen Engelberg
AF Offers to Close 15 Bases and Scrap Missiles
- 9 Nov 16, 89/Th 380 A-1 AP
Senate Approves New Defense Bill
- 10 Nov 16, 89/Th 466 D-1 Richard Stevenson
Northrop Names New Head For B-2 Bomber Program
- 11 Nov 10, 89/F 691 A-22 Michael Gordon
House Backs \$305 Billion Military Bill
- 12 Nov 3, 89/F 1037 A-1 Michael Gordon
Lawmakers Agree on 'Star Wars' Cut
- 13 Oct 27, 89/F 869 A-14 Richard Halloran
Conferees Near Accord on '90 Arms Programs
- 14 Oct 23, 89/M 1189 D-1 Matthew Wald
Renewed Debate on Nuclear Power
- 15 Oct 19, 89/Th 128 D-11 None
Net Off 25.3% At Northrop
- 16 Sep 28, 89/Th 958 A-1 Michael Gordon
'Star Wars' Fading as Major Element of US Strategy
- 17 Sep 27, 89/W 989 A-1 Andrew Rosenthal
'Star Wars' Funds Cut in the Senate
- 18 Sep 27, 89/W 304 A-14 Reuters
2 More Tests of Bomber Cut Short
- 19 Sep 15, 89/F 454 A-10 Michael Gordon
Bush to Assure Shevardnadze On Support for Arms
Control

20 Sep 13, 89/W	490	D-1	Eric Weiner
Dow Chemical Sets Venture With United Technologies			
21 Sep 13, 89/W	803	D-2	Peter Passell
Economic Scene; Talk Is Cheap, Dollars Dear			
22 Sep 10, 89/Su	951	3-8	Stan Luxenberg
Investing; Reducing the Volatility of Your Portfolio			
23 Sep 7, 89/Th	1205	A-1	Sam Verhovek
New Health Chief Proposes Medical Insurance for All in State			
24 Sep 7, 89/Th	1339	B-14	Richard Berke
Parties Skirmish Over a Strategy In War On Drugs			
25 Aug 27, 89/Su	162	1-1	AP
Stealth Bomber Takes Its Longest Test Flight			
26 Aug 26, 89/Sa	83	1-24	Special to NYT
Tiny Hydraulic Crack Caused B-2 Problems, AF Says			
27 Aug 24, 89/Th	846	A-20	Richard Halloran
Cheney Criticizes Cuts in Military			
28 Aug 20, 89/Su	2548	3-1	Richard Stevenson
Northrop's 'Awesome' B-2 Gamble			
29 Aug 17, 89/Th	1190	A-1	Andrew Rosenthal
Trident Failures in Tests Are Tied to Flawed Design			
30 Aug 17, 89/Th	374	B-1	AP
Gauge Cuts Short New Stealth Test			
31 Aug 16, 89/W	210	A-14	AP
Second Stealth Flight Scrubbed After Delay			
32 Aug 12, 89/Sa	82	1-24	None
Second Stealth Test Planned			
33 Aug 10, 89/Th	619	A-20	Andrew Rosenthal
Washington Talk; Politics			
34 Aug 4, 89/F	1506	A-7	David Sanger
Seeing a Dependent and Declining US, More Japanese Adopt a Nationalistic Spirit			
35 Aug 3, 89/Th	962	A-1	Andrew Rosenthal
Senators, At Odds with House, Pass Pentagon Budget			

- 36 Aug 3, 89/Th 336 D-4 AP
US Studies Boeing Bills
- 37 Aug 2, 89/W 782 A-15 Andrew Rosenthal
Senate Give Bush a Missiles Victory
- 38 Aug 1, 89/Tu 852 A-15 Robin Toner
Budget Roundup; House Sets Its Own Spending After
Debate on the Cost of Lawmakers' Mail
- 39 Jul 29, 89/Sa 953 1-1 Andrew Rosenthal
Uprising in the House; Members Said No to Bush on
Military Without a grand Design of Their Own
- 40 Jul 29, 89/Sa 1185 1-1 Bernard Weinraub
Bush Suggesting He'd Compromise on Capital Gains
- 41 Jul 29, 89/Sa 401 1-9 Bernard Trainor
Gorbachev Aide Says Soviets Would Counter Stealth
Plane
- 42 Jul 28, 89/F 979 A-1 Andrew Rosenthal
House, 176-90, Votes to Scrap the Midgetman
- 43 Jul 28, 89/F 639 B-5 Andrew Rosenthal
Washington Talk; The Pentagon
- 44 Jul 27, 89/Th 1127 A-1 Andrew Rosenthal
House Backs Cut in Bomber Project of \$1 Billion in
'90
- 45 Jul 26, 89/W 1091 A-1 Andrew Rosenthal
Senate Deals Bush a Loss by Delaying Stealth
Spending
- 46 Jul 25, 89/Tu 844 A-18 Andrew Rosenthal
Panel Defeats Attempt to Increase Support for War
Planes in Budget
- 47 Jul 22, 89/Sa 634 1-6 Richard Halloran
Stealth Bomber Is Key to Arms Talks,
Administration Warns
- 48 Jul 21, 89/F 1047 B-5 Andrew Rosenthal
Spending Freeze Is Threatened for Stealth Bomber
Program
- 49 Jul 20, 89/Th 856 D-1 Richard Stevenson
Northrop and McDonnell Report 2d Quarter Deficits
- 50 Jul 19, 89/W 648 A-16 Andrew Rosenthal
Washington Talk; Politics

- 51 Jul 18, 89/Tu 1154 A-15 Richard Stevenson
US Stealth Bomber Makes Test Flight Without Mishap
- 52 Jul 17, 89/M 922 A-14 Richard Halloran
Washington Talk; Stealth Bomber Suffers From
Secrecy, High Cost and an Unclear Purpose
- 53 Jul 16, 89/Su 611 1-22 AP
Maiden Flight of Stealth Bomber Aborted by Low
Pressure Reading
- 54 Jul 15, 89/Sa 650 1-8 Andrew Rosenthal
Senate Committee Approves Cheney's '90 Military
Plan
- 55 Jul 14, 89/F 327 B-5 Andrew Rosenthal
Defense Chief Warns House Panel on Cuts in 'Star
Wars Budget
- 56 Jul 11, 89/Tu 239 A-17 AP
Stealth Bomber Tested at Full Engine Power
- 57 Jun 29, 89/Th 535 A-15 Richard Halloran
House Panel Narrowly Rejects Cheney Arms Plan
- 58 Jun 27, 89/Tu 906 A-20 Andrew Rosenthal
Washington Talk; New Steps for the Military Budget
Dance
- 59 Jun 24, 89/Sa 827 1-8 Andrew Rosenthal
Criticism Mounts on Stealth Cost
- 60 Jun 22, 89/Th 861 B-7 Richard Halloran
Washington Talk; 'Treaty' Within Pentagon Is
Elusive
- 61 Jun 15, 89/Th 814 B-11 Andrew Rosenthal
Approval Urged for Entire Pentagon Buying Plan
- 62 Jun 10, 89/Sa 542 1-10 Richard Halloran
Stealth Bomber is Given Go-Ahead
- 63 Jun 9, 89/F 661 A-24 Andrew Rosenthal
Washington Talk; Pentagon
- 64 Jun 5, 89/M 1577 D-1 Eric Weiner
Innovative Plane Making Its Debut
- 65 May 24, 89/W 134 A-29 AP
Anti Radar missile Succeeds In Second Test by AF

- 66 May 20, 89/Sa 659 1-10 Charles Mohr
Ex-Pentagon Official Calls Stealth Bomber Too
Costly
- 67 May 18, 89/Th 189 D-5 Special to NYT
Company News; Northrop Plans 2,500 Job Cuts
- 68 May 8, 89/M 219 D-3 AP
Hughes Is Sued Over Radar
- 69 May 2, 89/Tu 1002 A-1 Bernard Weinraub
Cheney Remarks on Soviet Future Ruffle the White
House's Feathers
- 70 Apr 28, 89/F 804 D-2 Leonard Silk
Economic Scene; The Arms Budget and Global Goals
- 71 Apr 26, 89/W 879 A-21 Michael Gordon
Cheney Defends Budget Decisions to Cut Some Weapon
Programs
- 72 Apr 25, 89/Tu 841 D-9 Richard Stevenson
Northrop's B-2 Plane; A Case Study of Risk
- 73 Apr 24, 89/M 1548 A-1 Michael Gordon
Bush Plans to Cut Reagan Requests for Key Weapons
- 74 Apr 21, 89/F 580 D-5 James Hirsch
Business People; Northrop's Chairman Will Retire
as Chief
- 75 Apr 16, 89/Su 665 1-2 Andrew Rosenthal
Fight Is Expected Over Defense Budget Plan
- 76 Apr 13, 89/Th 659 A-18 Andrew Rosenthal
Washington Talk: The Pentagon
- 77 Mar 24, 89/F 793 A-14 Andrew Rosenthal
MX-Midgetman Battle Turns Toward Compromise
- 78 Mar 13, 89/M 63 A-12 AP
B-2's First Flight Delayed
- 79 Mar 2, 89/Th 658 B-11 Richard Halloran
As Pentagon Budget Unfolds, Space Missile Shield
Is Intact
- 80 Mar 1, 89/W 1137 D-6 Philip Ross
Business Technology; Police Gaining on Speeders
Again

- 81 Feb 21, 89/Tu 206 A-17 AP
Boeing Curtails Testing of New Bomber's Bolts
- 82 Feb 19, 89/Su 999 3-13 Peter Lewis
The Executive Computer; Drawing a Bear, or
Anything Else
- 83 Feb 16, 89/Th 257 D-16 Special to NYT
Deficit Cited by Northrop
- 84 Feb 4, 89/Sa 545 1-3 Michael Gordon
Envoy to Germany Is Named Chief US Arms Negotiator
- 85 Feb 2, 89/Th 340 C-13 Special to NYT
Report Finds Poverty Among Children Is Up
- 86 Jan 15, 89/Su 924 1-20 Andrew Rosenthal
GM Executive Is Expected To Get No. 2 Pentagon Job
- 87 Jan 12, 89/Th 375 A-23 Andrew Rosenthal
Aspin Asks Long-Term Budget for Strategic Arms
- 88 Jan 11, 89/W 1407 D-1 Richard Stevenson
California's 6-Year Boom May Be Over
- 89 Jan 10, 89/Tu 525 A-17 Andrew Rosenthal
The Final Reagan Budget; Military Request Includes
Tempting Targets
- 90 Jan 3, 89/Tu 1038 B-4 Richard Halloran
Washington Talk: Working Profile: Army Secretary
John O. Marsh Jr.; Military Leader Wins High
Ground, Quietly
- 91 Dec 17, 88/Sa 636 1-12 Richard Halloran
AF Raises Cost Estimate of Stealth Bombers to
\$68.1 Billion
- 92 Dec 14, 88/W 1248 B-14 Richard Halloran
Washington Talk; Military Aircraft; Stealth Sheds
Secrets, But Its Cost Stays Hidden
- 93 Dec 13, 88/Tu 333 C-9 None
Difficulties Reported in Deploying Satellite
- 94 Dec 12, 88/M 1431 A-1 Andrew Rosenthal
After Reagan, Military Shows New Muscles But Old
Aches
- 95 Dec 9, 88/F 1116 A-20 Peter Kilborn
Gorbachev's Journey; Gorbachev Plan Seen Helping
Deficit

- 96 Dec 7, 88/W 768 A-22 William Robbins
Knob Noster Journal; Bomber Means Boom for Base
Town
- 97 Dec 7, 88/W 1608 D-1 Lawrence Fisher
Company News; Boeing Challenged by Its Backlog
- 98 Dec 4, 88/Su 1424 1-1 William Broad
New Satellite Is the First In a Class of All-
Weather Spies, Experts Say
- 99 Nov 29, 88/Tu 224 D-25 Randall Rothenberg
The Media Business: Advertising; Honda Keeps the
Stealth
- 100 Nov 28, 88/M 1046 A-1 Michael Gordon
Military Savings Suggested to Bush
- 101 Nov 26, 88/Sa 678 1-7 Richard Halloran
AF Prepares First Base for Stealth Bomber
- 102 Nov 23, 88/W 1280 D-19 Malcolm Browne
Music and Debate Mark Stealth Bomber's Debut
- 103 Nov 21, 88/M 1580 D-1 Richard Stevenson
Northrop At Key Point on Bomber

Los Angeles Times

- 1 Dec 30, 89/Sa 1466 A-22 Robert Toth
Air-launched Cruise Missiles Dispute Is Biggest
Hurdle in US-Soviet Arms Talk; Disarmament:
Cutbacks in B-2 Stealth Bomber Program Fuel
Pentagon's Position, But US War Plan May Be
Outdated To Recent Changes in East Bloc
- 2 Dec 27, 89/W 845 D-1 Gregory Crouch
Ex-engineer's Suit Claims Hughes Hid Defects In
Chips: Manufacturing: The 4 Million Microchips
Were Used in A Variety of Defense Systems. But
Hughes Aircraft Denied the Allegations In the
Metallurgist's \$9.6 Billion Suit.
- 3 Dec 24, 89/Su 2680 D-1 Harry Anderson
Bracing for the 'Build-down'; Aerospace: Defense
Cutbacks Will Hit the Southern California Economy
Hard. But the Suffering Isn't Likely to Be As
Great As It Was 20 Years Ago
- 4 Dec 24, 89/Su 2718 D-1 Ralph Vartabedian
How Defense Contractors Hope to Cope

- 5 Dec 24, 89/Su 555 A-1 Melissa Healy
1st Combat for Stealth Fighter -- Panama Airfield
Bombed
- 6 Dec 24, 89/Su 2650 A-1 Ralph Vartabedian
Column One; Rethinking Defense. Arming For the
'90s; The Crisis Ahead For Aerospace; Southern
California Firms Foresee A Short-Term Buffer From
Deep Spending Cuts. The Long-term Outlook Is
Cloudier and Already Having An Impact.
- 7 Dec 15, 89/F 596 D-1 Chris Kraul
Defense Firm Will Build On 60-Acre Site;
Aerospace: General Dynamics, The County's Biggest
Industrial Employer, Is Not Saying What Its Plans
Are For the Property West Of Rancho Bernardo.
- 8 Dec 15, 89/F 233 D-3 Chris Kraul
General Dynamics Buying San Diego Site
- 9 Dec 15, 89/F 299 D-12 Jesus Sanchez
Northrop Puts Headquarters Up For Sale
- 10 Dec 14, 89/Th 1042 A-1 Melissa Healy
Cheney Seeks Full Production of B-2; Military: The
Secretary Rejects A Plan To Stretch Out The
Stealth Schedule. The Decision Could Be A Boon To
The Southern California Defense Industry.
- 11 Dec 13, 89/W 917 A-14 John Broder
Turmoil In the East Bloc; E. European Events
Outrun Intelligence Analysts, Panel Told; Defense:
Pentagon Budgets and Plans Are 'Misleading and Out
of Sync,' Sen Nunn Tells Officials.
- 12 Nov 30, 89/Th 758 D-1 Ralph Vartabedian
Suit Claims Hughes Overcharged US on 4 Radar
Systems
- 13 Nov 24, 89/F 1021 A-1 Paul Houston
Administration Seeks To Temper Military Cuts
- 14 Nov 22, 89/W 316 A-12 AP
Bush Signs Japanese-American Reparation Guarantee
- 15 Nov 21, 89/Tu 1430 A-1 Ralph Vartabedian
Change In Europe Clouds Defense Industry Outlook

- 16 Nov 19, 89/Su 800 A-4 Robert Rosenblatt
Budget, Medicare Issues Push Congress Into Unusual
Sunday Session; Legislation: A Filibuster Over
Killing Catastrophic Care Is Threatened. It Could
Delay Adjournment
- 17 Nov 19, 89/Su 718 A-10 Melissa Healy
Cheney Urges Bush To Go Slow On Aid To Soviets;
Diplomacy: The Defense Secretary Reiterates His
Prediction That Gorbachev Will Probably Fail.
- 18 Nov 18, 89/Sa 1006 A-1 John Broder/Paul Houston
Pentagon Considers Major Budget, Troop Level Cuts
- 19 Nov 10, 89/F 778 A-27 John Broder
House Oks Defense Budget Despite Charges It Serves
Special Interests; Military: Some Complain That
National Security Is Sacrificed For Special Jobs
Projects
- 20 Nov 9, 89/Th 1543 D-1 Bruce Horovitz
Bunny, Fantasy Ads May End Chiat/Dalmojo's
Creative Drought
- 21 Nov 7, 89/Tu 776 D-2 Henry Weinstein
Lawsuit Alleges \$20 Billion In Stealth Fraud;
Defense: Unsealed Court papers Claim That Northrop
Overcharged The Government for The B-2 bomber From
the Word Go.
- 22 Nov 3, 89/F 840 A-16 John Broder
Conferees Agree On Defense Budget; Congress: The
Measure Totals \$305 Billion. But Gramm-Rudman
Cuts Could Lower That Figure And Force Reductions
In Troop Strength
- 23 Oct 30, 89/M 1739 D-5 Ralph Vartabedian
Composites Take Off; While Some Aerospace Sectors
Contract, The Southland's Makers of Reinforced
Plastics Try To Keep Up With Demand
- 24 Oct 26, 89/Th 336 B-7 AP
Soviet Military Spending Has Increased Under
Gorbachev, USAF Secretary Says
- 25 Oct 11, 89/W 891 D-3 Robert Rosenblatt
Seized Property Costs US, Panel Told
- 26 Oct 9, 89/M 1614 2-3 Glenn Zorpette
Science/Medicine; New Horizons In Radar; The US
And Australia Are Developing A New Technology To
Upgrade Aging Early Warning Networks.

- 27 Oct 7, 89/Sa 633 1-5 Melissa Healy
Future Soviet Defense Chief May Be Civilian, Yazov
Says
- 28 Oct 6, 89/F 576 4-2 Ralph Vartabedian
Stock Fall An Ominous Sign For Northrop
- 29 Oct 6, 89/F 289 A-3 AP
Supervisors Work As Machinists Picket; Boeing
Apologizes For Production Delays
- 30 Oct 5, 89/Th 838 1-3 E. Malnic/J. Chandler
Bomber's Balky Wheel Forces Dusty Descent
- 31 Sep 30, 89/Sa 402 1-15A Reuters
Soviet Defense Minister To Tour US Military Bases,
But B-2 Is Off Limits
- 32 Sep 29, 89/F 1337 1-3 Ralph Vartabedian
Now It Can Be Said--He Has The Right Stuff
- 33 Sep 27, 89/W 1074 1-14 Sara Fritz
Senate Rejects Increase In 'Star Wars' Spending;
Soviet View That Plan Won't Impede Arms Talks May
Have Weakened Support
- 34 Sep 27, 89/W 258 1-21 UPI
Wind, Problems Cut Short Stealth Bomber Test Hops
- 35 Sep 21, 89/Th 476 1-4 Sara Fritz
House Backs Almost Full Funding of B-2
- 36 Sep 21, 89/Th 399 1-11 William Rempel
Moscow Keeping Up Strategic Arms Strength, Cheney
Asserts
- 37 Sep 11, 89/M 570 2-1 John Dart
'Faithdome' -- Jesus' Grand-Slam Homer; \$9 Million
Geodesic Dome Draws 8,100 to First Service
- 38 Sep 7, 89/Th 1177 1-14 J. Gerstenzang/Wm Eaton
President Launches Campaign To Win Support For
Drug War Strategy
- 39 Sep 7, 89/Th 448 A-2 UPI
Bush Decries Critics Who Call Drug War Funds not
Enough
- 40 Sep 5, 89/Tu 394 A-3 Reuters
US Reported Ready To Join Northrop Lawsuit

- 41 Sep 3, 89/Su 1504 2-1 John Glionna
Launching An Anti-Nuke Crusade; Del Mar Activist
Sees Small Towns As Starting Point
- 42 Aug 27, 89/Su 4628 1-1 Tyler Marshall
War In Europe: The Legacy; Good Vanquishes Evil;
War Haunts, Still Shapes The World
- 43 Aug 27, 89/Su 361 1-3 AP
Stealth Bomber Ends Successful 3rd Test Flight
- 44 Aug 26, 89/Sa 461 4-1 Ralph Vartabedian
Crack Caused Curtailed Flight of B-2 Bomber; AF
Says It Knew Of Weakness In Gear Casing
- 45 Aug 25, 89/F 3593 1-1 David Shaw
Instant Consensus; How Media Gives Stories Same
'Spin'
- 46 Aug 24, 89/Th 668 1-23 John Broder
Cheney Bitingly Assails House Deferral Budget
- 47 Aug 23, 89/W 457 -9 John Broder
Further Delays Plague AF Transport Plane
- 48 Aug 21, 89/M 2251 1-3 Henry Weinstein
Anti-fraud Law's Merits Debated; Justice Dept.
Decision May Have Big Effect On Whistle Blowers
- 49 Aug 17, 89/Th 687 1-1 Ralph Vartabedian
'Minor' Flaw Shortens 2nd Stealth Flight
- 50 Aug 17, 89/Th 701 2-3 George Ramos
Lawmaker Urges State Take Role In Air Traffic
Control
- 51 Aug 16, 89/W 344 A-1 AP
Stealth Cuts Short Its Second Flight; Low Oil
Pressure Reading Forces It To Land After Hour
- 52 Aug 15, 89/Tu 678 4-2 Henry Weinstein
Judge Allows Northrop Fraud Suit To Continue
- 53 Aug 12, 89/Sa 116 1-27 UPI
2nd Stealth Bomber Test May Be Today
- 54 Aug 11, 89/F 134 A-2 UPI
Second Test Flight Of Stealth Bomber May Be
Saturday
- 55 Aug 7, 89/M 391 A-2 AP
Bush Pays Tribute to Col Higgins; Tells War Dept
Salute He Was 'A Symbol of Courage'

- 56 Aug 5, 89/Sa 954 1-25 William Eaton
House OKS Defense Bill; Farm Disaster Aid Approved
- 57 Aug 4, 89/F 343 A-1 AP
House Votes Cuts In Bush Defense Plan; \$2 Billion
Slash In Star Wars Spending; Curbs on B-2 OKD
- 58 Aug 3, 89/Th 657 1-11 Sara Fritz
Senators Fault Administration's Hostage Effort
- 59 Aug 3, 89/Th 247 4-7 AP
US Probing Charges Of Double Billing At Boeing
- 60 Aug 2, 89/W 2388 1-1 Ralph Vartabedian
Led To Sticker Shock; Why Did AF End Stealth On
Stealth?
- 61 Aug 2, 89/W 923 1-12 Sara Fritz
Senate Votes Extra Anti-Drug Funds; \$1.7 Billion
In Unspent Money Is Attached To 1990 Defense Bill
- 62 Aug 2, 89/W 465 A-3 AP
US Probes Claim of Boeing Overcharges and Double
Billing
- 63 Aug 1, 89/Tu 692 4-1 Sara Fritz
Senate Bill Would Require Northrop To Forgo
Profits On Stealth If Defects Found
- 64 Aug 1, 89/Tu 270 A-2 AP
Senate Endorses Plan to Make MX Missiles Mobile
- 65 Jul 30, 89/Su 782 1-1 Marlene Cimonis
Bush Upset At Congress Over Defense, S&LS
- 66 Jul 29, 89/Sa 600 1-4 AP
Soviet Military Adviser Caps US Trip With Bush
Meeting
- 67 Jul 29, 89/Sa 772 1-18 Marlene Cimonis
Defends Agenda Despite Budget Cuts; Bush Upset By
Congress' Actions On Defense, S&LS
- 68 Jul 28, 89/F 611 1-7 Sara Fritz
House Defense Bill Shifts Weapons Funds; Cuts In
Nuclear Arms Spending Called 'Michael Dukakis'
Budget
- 69 Jul 27, 89/Th 1175 1-1 Sara Fritz
House Votes Halt To Building B-2s; Measure, In
Conflict With Senate, Orders Cut In Stealth Bomber
Cost

- 70 Jul 27, 89/Th 544 4-1 Denise Gellene
Pentagon Probes Possible Fraud In Development Of
Stealth Bombers
- 71 Jul 26, 89/W 1277 1-1 Sara Fritz
Senate Backs Funding of Stealth Bomber, 98-1; Vote
For Production Sets Up Battle In Congress; House
Cuts \$1.8 Billion From 'Star Wars' Budget
- 72 Jul 26, 89/W 150 A-1 Reuters
US Probe of Northrop Over B-2 Confirmed
- 73 Jul 26, 89/W 301 A-1 Wire Services
House Votes To Fund Just 2 B-2s; Also Calls For
Cut In Program in '90 To Reduce Cost
- 74 Jul 25, 89/Tu 3107 1-1 Robert Toth
Proposed Arms Pact Launches Strategy Debate
- 75 Jul 25, 89/Tu 833 1-5 Sara Fritz
Bush Urges Full Funding Of Stealth Bomber As
Skeptics Clamor For Cuts
- 76 Jul 24, 89/M 4215 1-1 Robert Toth
Planners Split On How To Meet Nuclear Threat
- 77 Jul 24, 89/M 377 A-2 Reuters
Bush Seeks Full Funding For Stealth; Congress
Urged To Support Bomber At Cost Of \$70.2 Billion
- 78 Jul 23, 89/Su 4936 1-1 Robert Toth
America's Changing Nuclear Strategy; US Shifts
Nuclear Response Strategy; New Formula Designed To
Eliminate Soviet Leadership Early In Conflict
- 79 Jul 23, 89/Su 850 4-5 Paul Farhi
Contractors' Ads Tout Pet Projects; 'Advocacy'
Messages Timed To Win Support In Congress
- 80 Jul 22, 89/Sa 802 1-25 Melissa Healy
AF Officials To Fight Start Pact If B-2 Is Killed
- 81 Jul 21, 89/F 500 4-1 Ralph Vartabedian
B-2 Test Pilots Will Lobby Congress In Bid To Help
Stealth
- 82 Jul 20, 89/Th 824 4-1 Ralph Vartabedian
Two Major Aerospace Firms Post Huge Losses;
Northrop Takes \$150 Million Charge On Secret
Program; McDonnell's 4 Major Projects Are In Red
- 83 Jul 20, 89/Th 295 A-2 AP
House Defense Leader Says He'll Try to Force
Cheney To Cut Cost of B-2 Program

- 84 Jul 18, 89/Tu 1383 1-1 Ralph Vartabedian
Stealth Bomber Makes 1st Flight; AF Pleased By 2-
Hour Test, But Cost Doubts Are Not Erased
- 85 Jul 18, 89/Tu 432 2-8 Sebastian Rotella
Pilot Who Dropped In On B-2 Won't Face Charges
- 86 Jul 18, 89/Tu 120 A-1 Wire Services
Stealth Bomber Taken Apart
- 87 Jul 17, 89/M 268 1-19 Wire Services
Initial Flight Of Stealth Bomber Reset For Today
- 88 Jul 17, 89/M 502 A-1 Wire Services
Stealth Flies For First Time, Heating Up Capitol
Debate; B-2 Facing New Hurdle, Aspin Says
- 89 Jul 16, 89/Su 662 1-3 Ralph Vartabedian
Fuel System Glitch Forces Scrapping of B-2 Test
Flight
- 90 Jul 16, 89/Su 572 1-3 Victor Merina
Pilot Drops In Uninvited, Goes Out a 'Celebrity'
- 91 Jul 15, 89/Sa 975 1-1 Sara Fritz
Defense Budget OKD But Panel Wants B-2 Test
- 92 Jul 15, 89/Sa 1094 1-24 Ralph Vartabedian
First Flight Creating 'As Much Hype As Batman
Movie;' B-2; Some View It As The 'PR Bomber'
- 93 Jul 14, 89/F 549 1-24 Sara Fritz
Panel Rejects Stealth Curbs, OKs Funding
- 94 Jul 14, 89/F 165 4-3 Ralph Vartabedian
Stealth Bomber Completes First High-Speed Taxi
Tests
- 95 Jul 13, 89/Th 404 A-3 UPI
Cheney Defends Cost Of Stealth Bomber; Cites
History In Justifying Price To Stunned Panel
- 96 Jul 13, 89/Th 590 1-6 Melissa Healy
Capitol Hill Has 'Sticker Shock' Over B-2
- 97 Jul 12, 89/W 353 4-2 AP
B-2 Is Key To US Defense Strategy, Congress Told
- 98 Jul 11, 89/Tu 320 4-1 Patrick Lee
Stealth Bomber Taxies On Its Own Power For 1st Time

- 99 Jul 10, 89/M 163 A-1 Wire Services
Stealth Bomber Moves Under Its Own Power For The
First Time
- 100 Jul 8, 89/Sa 131 1-2 Staff Writer
First Stealth Bomber Flight Near
- 101 Jul 2, 89/Su 1749 1-1 Ralph Vartabedian
Stealth Bomber Near Test; Can It Fly Financially?
- 102 Jun 29, 89/Th 861 1-1 Melissa Healy
Panel Cuts \$800 Million In Stealth Bomber Funds
- 103 Jun 28, 89/W 460 1-13 Melissa Healy
Panel Cuts Stealth, 'Star Wars' Funding
- 104 Jun 28, 89/W 481 4-2 Ralph Vartabedian
Northrop's Problems; First Flight of Stealth
Bomber Delayed
- 105 Jun 24, 89/Sa 184 1-19 Staff Writer
B-2 Costs To Escalate, AF Figures Show
- 106 Jun 23, 89/F 544 1-25 Melissa Healy
House Panel OKS Cuts In Stealth Research
- 107 Jun 21, 89/W 830 1-5 Sara Fritz
Bush's Defense Cuts Approved By House Panel; B-2
Bomber Untrimmed; No Programs Are Added Due To
Budget Squeeze
- 108 Jun 20, 89/Tu 375 4-2 Ralph Vartabedian
Northrop's Customs Auctions Probed
- 109 Jun 16, 89/F 604 4-2 Ralph Vartabedian
Stealth Bomber Cost Estimate Hits \$70 Billion
- 110 Jun 12, 89/M 662 4-1 Ralph Vartabedian
US Investigating Northrop Defense Plant In
Illinois
- 111 Jun 7, 89/W 205 4-2 Ralph Vartabedian
Suit By Hughes Manager Claiming Wrongful
Termination Is Tossed Out
- 112 Jun 3, 89/Sa 943 2-1 Kim Murphy
Judge OKS Contractor Fraud Suit By Citizen
- 113 Jun 1, 89/Th 1077 1-1 Ralph Vartabedian
Anticipated US Cutbacks To Cost 6,000 Hughes Jobs
- 114 Jun 1, 89/Th 1207 1-1 Ralph Vartabedian
Hughes To Cut 6,000 Jobs As Defense Slows

- 115 May 20, 89/Sa 409 4-1 David Olmos
Costs For Stealth Bomber Are Stable, Northrop Says
- 116 May 19, 89/F 771 4-1 Ralph Vartabedian
Stealth Program Should End, Says Ex-defense
Official
- 117 May 18, 89/Th 1185 1-1 Ralph Vartabedian
Northrop Plant In Anaheim May be Sold
- 118 May 18, 89/Th 1064 4-1 Ralph Vartabedian
Northrop To Cut Up To 3,000 Jobs By End Of Year
- 119 May 17, 89/W 345 4-3 Ralph Vartabedian
Sales Of Stealth For Quarter: \$657 Million
- 120 May 13, 89/Sa 740 4-1 Ralph Vartabedian
Northrop's Stealth Bomber Marks A Crucial
Milestone
- 121 May 9, 89/Tu 363 4-1 John Broder
Aspin Questions Value Of Stealth Bomber
- 122 May 5, 89/F 917 4-1 Ralph Vartabedian
Hughes Accused Of Overcharging On Defense Jobs;
High-Level Manager At Firm Sues; Claim Involves
Work On B-2 Bomber, F-18
- 123 May 4, 89/Th 1695 1-1 Ralph Vartabedian
Weapons Makers Face Protracted Downturn
- 124 May 4, 89/Th 973 2-8 Steve Padilla
Santa Clarita Citizen; Newhalls Calling It Quits;
Close Upstart Paper
- 125 May 1, 89/M 1716 1-3 Kim Murphy
Military Contractors Challenging Whistle-Blower
Law
- 126 May 1, 89/M 536 1-13 Melissa Healy
AF Seeking \$1.2 Billion To Fix Troubled B-1B
Bomber
- 127 Apr 26, 89/W 1225 1-1 John Broder
Cheney Seeking \$10 Billion In Pentagon Cuts
- 128 Apr 26, 89/W 617 1-16 Melissa Healy
Cheney Proposals A Blow To Ft Worth Contractors;
Defense Cuts Hit Wright's District Hard

- 129 Apr 26, 89/W 990 4-1 Ralph Vartabedian
B-2 Program Faces Major Budget Squeeze; Funding
Cuts For Stealth Bomber Raises Layoff Concerns At
Northrop
- 130 Apr 24, 89/M 797 1-1 Stanley Meisler
Cheney Reveals 1-Year Delay On Stealth Bomber
- 131 Apr 21, 89/F 1416 4-1 B. Sing/J. Peterson
Northrop's Jones To Retire; Longtime CEO's Era
Marked By Successes, Much Controversy
- 132 Apr 21, 89/F 565 4-5 George White
Next Northrop CEO; Kresa Choice Surprises Few,
Pleases Many
- 133 Apr 20, 89/Th 758 4-6 Denise Gellene
Northrop First-Quarter Profit Sharply Lower;
Weapons System Cited
- 134 Apr 15, 89/Sa 1332 1-1 Tom Redburn
President Announces Broad Budget Accord; But Plan
To Hold Deficit Under \$100 Billion Puts Off Key
Decisions On Spending and Taxes
- 135 Apr 4, 89/Tu 494 A-3 Reuters
Lockheed Creates ESOP To Preempt Simmons Takeover
- 136 Mar 31, 89/F 514 4-2 Melissa Healy
Thousands Of Employees To Be Told Jobs Depend On
Funding; Stealth Bomber Workers Could Face Layoffs
- 137 Mar 30, 89/Th 854 1-10 John Broder
Pentagon Budget May Be Slashed Beyond \$6.3 Billion
In Cuts Already Under Review
- 138 Mar 24, 89/F 928 4-1 Bruce Horovitz
'Oscar' Night For State's Ad Firms; It Takes
Stealth To Win Top Prize
- 139 Mar 22, 89/W 686 1-14 Melissa Healy
Deal To Build Two Missile Systems Seen; Basing MXs
On Rail Cars Linked To OK For Costly Midgetman
- 140 Feb 21, 89/Tu 1460 4-9A Crouch/Vartabedian
Lawsuit Alleges Voi-Shan Falsified Results Of
Parts Tests
- 141 Feb 21, 89/Tu 1458 4-1 Crouch/Vartabedian
Fairchild Falsified Tests On Aircraft Parts, Suit
Claims

- 142 Feb 20, 89/M 404 4-2 AP
Report: Boeing Unit May Have Cut Parts Tests
- 143 Feb 16, 89/Th 488 4-1 Ralph Vartabedian
\$150 Million Charge By Northrop Produces A 4th-
Quarter Loss
- 144 Feb 16, 89/Th 472 4-2 Melissa Healy
California Still Leads Nation In Defense Awards
- 145 Feb 4, 89/Sa 913 1-23 Robert Toth
Defense Panel Urges Reviving Of Plan To 'Hide'
ICBMS
- 146 Jan 27, 89/F 2570 1-1 Tom Furlong
Hard Questions May Bring Reforms; S&L Rescue Could
Cost Average Taxpayer \$450
- 147 Jan 20, 89/F 595 1-26 Tom Redburn
Pentagon Must Trim Plans, Darman Says
- 148 Jan 20, 89/F 354 4-3 Ralph Vartabedian
People: Northrop Names New Manager For Stealth
- 149 Jan 13, 89/F 1527 1-1 Robert Shogan
See No Need For Sweeping Initiatives; First 100
Days; Experts Urge Bush To Go Slowly
- 150 Jan 12, 89/Th 434 1-18 John Broder
Aspin Urges New Ways To Fund Weapons
- 151 Dec 21, 88/W 631 1-23 Robert Gillette
Panel Calls Apportioning Of Federal Funds
Haphazard; Coordination of Science Research Urged
- 152 Dec 18, 89/Su 340 1-11 UPI
Stealth Bomber Program Costs Rise 16%
- 153 Dec 17, 88/Sa 508 1-26 Melissa Healy
AF To Accelerate Stealth Bomber Program
- 154 Dec 13, 88/Tu 1706 4-1 Bruce Horovitz
Race Is On For Luxury 'Bloody Mess' Foreseen As
\$175 Million Is Budgeted For Ads In Japan's Next
Lap
- 155 Dec 10, 88/Sa 933 1-1 Melissa Healy
Pentagon Likely To Slow Production of Stealth
Bomber
- 156 Dec 4, 88/Su 533 1-24 Wire Services
Release Of Spy Satellite Expected; NASA Dishes Up
Menu, No News On Atlantis' Day

- 157 Dec 2, 88/F 453 1-1 AP
Space Shuttle Rockets Into Orbit On Secret Side
Mission
- 158 Nov 27, 88/Su 707 4-1 James Flanigan
Stealth Can't Fill US Gap In Technology
- 159 Nov 23, 88/W 1235 1-1 Ralph Vartabedian
Stealth Bomber Unveiled Amid Pomp, Huzzahs
- 160 Nov 22, 88/Tu 2317 1-1 William Overend
Effect Of Spy Scandals; Public Awakens To Threat
Of Espionage, Officials Say
- 161 Nov 22, 88/Tu 617 1-1 AP
AF Draws Back Veil On Secret Stealth Bomber;
Flying Wing Rolled Out To Cheers
- 162 Nov 21, 88/M 1868 1-20 Melissa Healy
Some Say Bomber Portends More Headaches For US
Than For Enemy; If Stealth Is Nightmare, Critics
Wonder Whose